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EXAMINER

FAILE, ANDREW I

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2611

31

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/444,788

Applicant(s)

HARVEY ET AL.

Examiner

DAVID E HARVEY

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 1998.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 4-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. As indicated by applicants, it is agreed the instant pending amended claims are (at best) only entitled to the 9/11/1987 effective filing date of parent application 07/096096, now U.S. Patent #4,965,825.

[e.g. note APPENDIX I attached hereto].

2. Seeking Consistency:

During the present prosecution, many of the same issues have been raised in different ones of applicants' many copending applications. In at least some cases, these issues appear to have been handled and addressed inconsistently between applications. Thus, a "list" that sets forth positions held by the examiner/Office with regard to identified ones of such overlapping issues has been generated by the examiner (see APPENDIX III attached hereto). This list will be maintained by the examiner/Office in an attempt to ensure that the issues are in fact handled consistently among the related applications.

3. Claims 2, and 4-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The following is noted:

a. It is not clear where the disclosure as originally filed described the "selecting" step of lines 8-10 of claim 2 in which "information" that was to be associated with mass medium programming, which information included "software", was selected "based on a schedule" that was inputted to a "computer". Clarification is needed.

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b. It is not clear where the disclosure as originally filed described the "selecting" step of lines 8-10 of claim 2 in which "information" that was to be associated with mass medium programming, which information included "video", was selected "based on a schedule" that was inputted to a "computer". Clarification is needed.

c. It is not clear where the disclosure as originally filed described the "selecting" step of lines 8-10 of claim 2 in which "information" that was to be associated with mass medium programming, which information included "audio", was selected "based on a schedule" that was inputted to a "computer". Clarification is needed.

d. It is not clear where the disclosure as originally filed described the "detecting" step of lines 11-14 of claim 2 in which the presence of a control signal, designating "mass medium programming", was detected and the so detected control signal was passed to the computer to which said schedule was inputted. Clarification is needed.

e. It is not clear where the disclosure as originally filed described the "detecting" step of lines 11-14 of claim 2 in which the presence of a control signal, designating said "information that was to be associated with the mass medium programming" (including the "software" that was designated by the schedule that was inputted to said computer), was detected whereby the so detected control signal was passed to said computer to which said schedule was inputted. Clarification is needed.

f. It is not clear where the disclosure as originally filed described the "detecting" step of lines 11-14 of claim 2 in which the presence of a control signal, designating said "information that was to be associated with the mass medium programming" (including the "video" that was designated by the schedule that was inputted to said computer), was detected whereby the so detected control signal was passed to said computer to which said schedule was inputted. Clarification is needed.

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g. It is not clear where the disclosure as originally filed described the "detecting" step of lines 11-14 of claim 2 in which the presence of a control signal, designating said **"information that was to be associated with the mass medium programming"** (including the **"audio"** that was designated by the schedule that was inputted to said computer), was detected whereby the so detected control signal was passed to said computer to which said schedule was inputted. Clarification is needed.

h. It is not clear where the disclosure as originally filed described the **"selected signal generator"** of line 17 of claim 2 to which the **"information that was to be associated with the mass medium programming"** (including the **"software"** that was designated by the schedule that was inputted to said computer) was communicated by controlling a "selective transmission device. Clarification is needed.

i. It is not clear where the disclosure as originally filed described the **"selected signal generator"** of line 17 of claim 2 to which the **"information that was to be associated with the mass medium programming"** (including the **"video"** that was designated by the schedule that was inputted to said computer) was communicated by controlling a "selective transmission device. Clarification is needed.

j., It is not clear where the disclosure as originally filed described the **"selected signal generator"** of line 17 of claim 2 to which the **"information that was to be associated with the mass medium programming"** (including the **"audio"** that was designated by the schedule that was inputted to said computer) was communicated by controlling a "selective transmission device. Clarification is needed.

k. It is not clear where the disclosure as originally filed described the **"signal generator"** of line 17 of claim 2 to which the **"information that was to be associated with the mass medium programming"** (including the **"software"** that

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was designated by the schedule that was inputted to said computer) was communicated "at a selected time" by controlling a "selective transmission device. Clarification is needed.

l. It is not clear where the disclosure as originally filed described the "signal generator" of line 17 of claim 2 to which the "information that was to be associated with the mass medium programming" (including the "video" that was designated by the schedule that was inputted to said computer) was communicated "at a selected time" by controlling a "selective transmission device. Clarification is needed.

m. It is not clear where the disclosure as originally filed described the "signal generator" of line 17 of claim 2 to which the "information that was to be associated with the mass medium programming" (including the "audio" that was designated by the schedule that was inputted to said computer) was communicated "at a selected time" by controlling a "selective transmission device. Clarification is needed.

n. It is not clear where the disclosure as originally filed described the "generating" step of lines 18-20 of claim 2 wherein the generated "signal" contained mass medium programming and the information to be associated therewith, wherein said associated information included "software". Clarification is needed.

o. It is not clear where the disclosure as originally filed described the "generating" step of lines 18-20 of claim 2 wherein the generated "signal" contained mass medium programming and the information to be associated therewith, wherein said associated information included "video". Clarification is needed.

p. It is not clear where the disclosure as originally filed described the "generating" step of lines 18-20 of claim 2 wherein the generated "signal" contained mass

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medium programming and the information to be associated therewith, wherein said associated information included **"audio"**. Clarification is needed.

q. With respect to the limitations of claim 5, it is not clear where the disclosure as originally filed described the step of "communicating" the "audio" that is included within the "mass medium programming" of claim 2 to a transmitter in accordance with the schedule that was inputted to said computer. Clarification is needed.

r. With respect to the limitations of claim 6, it is not clear where the disclosure as originally filed described the "mass medium programming" of claim 2 which included the **"graphic"** that is recited in line 2 of claim 6. Clarification is needed.

s. With respect to the limitations of claim 6, it is not clear where the disclosure as originally filed described the "mass medium programming" of claim 2 which included the **"video"** that is recited in line 2 of claim 6. Clarification is needed.

t. With respect to the limitations of claim 6, it is not clear where the disclosure as originally filed described the "mass medium programming" of claim 2 which included the **"audio"** that is recited in line 2 of claim 6. Clarification is needed.

u. With respect to the limitations of claim 6, it is not clear where the disclosure as originally filed described the **"second mass medium programming"** of line 6 that was communicated to a transmitter based on a received **"response from a subscriber"** to a presentation containing **"a graphic"**. Clarification is needed.

v. With respect to the limitations of claim 6, it is not clear where the disclosure as originally filed described the **"second mass medium programming"** of line 6 that was

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communicated to a transmitter based on a received **"response from a subscriber"** to a presentation containing **"video"**. Clarification is needed.

w. With respect to the limitations of claims 6, it is not clear where the disclosure as originally filed described the **"second mass medium programming"** of line 6 that was communicated to a transmitter based on a received **"response from a subscriber"** to a presentation containing **"audio"**. Clarification is needed.

x. With respect to the limitations of claim 7, it is not clear where the disclosure as originally filed described the recited "selecting" step of line 3 wherein the "information" to be associated with the mass medium programming includes "software" and **"code"** was selected by said selecting step. Clarification is needed.

y. With respect to the limitations of claim 7, it is not clear where the disclosure as originally filed described the recited "selecting" step of line 3 wherein the "information" to be associated with the mass medium programming includes "software" and **"data"** was selected by said selecting step. Clarification is needed.

z. With respect to the limitations of claim 8, it is not clear where the disclosure as originally filed described the recited "remote receiver station" which was programmed to select and control the communication of mass medium programming based on said schedule of claim 2 which was inputted to the computer of a transmitter station. Clarification is needed.

aa. With respect to the limitations of claim 13, it is not clear where the disclosure as originally filed described the recited **"second mass medium programming"** of claim 6 that included **"a graphic"**. Clarification is needed.

bb. With respect to the limitations of claim 13, it is not clear where the disclosure as originally filed described

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the recited "**second mass medium programming**" of claim 6 that included "**audio**". Clarification is needed.

cc. With respect to the limitations of claim 13, it is not clear where the disclosure as originally filed described the recited "**second mass medium programming**" of claim 6 that included "**video**". Clarification is needed.

dd. With respect to the limitations of claim 11, it is not clear where the disclosure as originally filed described the recited "transmitter station" of line 1 which was controlled by the recited method of claim 11 wherein the recited method included each/all the following steps:

- (1) "Receiving an information transmission to be transmitted";
- (2) "Receiving a schedule to be transmitted";
- (3) "Receiving a transmitter control signal";
and
- (4) "Transmitting said [received] information transmission, said [received] schedule, and said [received] transmitter control signal".

Clarification is needed.

ee. With respect to the limitations of claim 11, it is not clear where the disclosure as originally filed described a method having the recited steps of:

- (1) "Receiving an information transmission to be transmitted";
- (2) "Receiving a schedule to be transmitted";
- (3) "Receiving a transmitter control signal";
and

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(4) "Transmitting said [received] information transmission, said [received] schedule, and said [received] transmitter control signal";

wherein the so [received and transmitted] schedule effected a remote transmitter station to: (1) select information to be associated with mass medium programming wherein this selected information comprised each of video/audio/software; (2) generate a first signal containing the mass medium programming and the associated information comprised of video/audio/software; and (3) transmit said so generated first signal.

Clarification is needed.

ff. With respect to the limitations of claim 11, it is not clear where the disclosure as originally filed described a method having the recited steps of:

(1) "Receiving an information transmission to be transmitted";

(2) "Receiving a schedule to be transmitted";

(3) "Receiving a transmitter control signal";
and

(4) "Transmitting said [received] information transmission, said [received] schedule, and said [received] transmitter control signal";

wherein the so [received and transmitted] schedule effected a remote receiving station to: (1) select information to be associated with mass medium programming wherein this selected information comprised each of video/audio/software; (2) generate a first signal containing the mass medium programming and the associated information comprised of

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video/audio/software; and (3) transmit said so generated first signal.

Clarification is needed.

gg. With respect to the limitations of claim 12, it is not clear where the disclosure as originally filed described the recited "**computer means**" of line 2 "for receiving a schedule." Clarification is needed.

hh. With respect to the limitations of claim 12, it is not clear where the disclosure as originally filed described the recited "**control signal detecting means**" of line 9 "for detecting the presence of a control signal at said transmitter station." Clarification is needed.

ii. With respect to the limitations of claim 12, it is not clear where the disclosure as originally filed described the recited "**selective transmission means**" of line 14 "for communicating information" to a signal generator. Clarification is needed.

jj. With respect to the limitations of claim 12, it is not clear where the disclosure as originally filed described the recited "**signal generating means**" of line 17 "for generating a signal containing" mass medium programming and associated information including each of video/audio/software. Clarification is needed.

kk. With respect to the limitations of claim 12, it is not clear where the disclosure as originally filed described the recited "transmitter means" of line 20, coupled to said signal generating means, "for transmitting said [generated] signal. Clarification is needed.

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4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 4, line 1, "said signal" has multiple antecedent basis and is indefinite when referred back to claim 2 because it is unclear whether "said signal" of line 2 refers back to the control "signal" that was recited in line 11 of claim 2, to the generated "signal" of line 18, or to some other signal. Clarification is needed.

b. In claim 4, lines 3 and 4, "said signal" has multiple antecedent basis and is indefinite when referred back to line 1 of claim 2 and to claim 2 because it is unclear whether "said signal" of lines 3 and 4 refers back to the "signal" that was recited in line 1 of claim 4, the control "signal" that was recited in line 11 of claim 2, to the generated "signal" of line 18, or to some other signal. Clarification is needed.

c. The recitations of claim 4 are confusing and appear to be misdescriptive because it is unclear how "said signal" of Claim 4 can be "one of a broadcast and cablecast transmission" as is recited in lines 1 and 2 while at the same time being "embedded in a specific portion of said one of a broadcast and cablecast transmission"; i.e. namely "said signal" of line 1 and "said signal" of line 3 and 4 of claim 4 seem actually seem to be referring back to different one of the "signals" that are recited in claim 2 (?). Clarification is needed.

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5. Conventional Television Transmitter Structure(s):

[note: appendix IV of this Office action too]

I. The Showing of McArthur and Murasaki et al.:

A) McArthur: The figure at the top of page 39 in McArthur has been cited for its broad showing of conventional TV transmitter system structure. Namely, this figure evidences the fact that it was notoriously well known in the art for TV transmitter systems to have comprised:

- 1) A "television studio" for producing and providing the "television signal" that was to be transmitted from the transmitter station;
- 2) A teletext "editing suite" for providing the teletext "data" that was to be inserted into the television signal that was to be transmitted by the transmitter station;
- 3) A teletext "data inserter" for inserting the provided teletext "data" into the VBI of the provided "television signal" to produce combined TV information signaling;
- 4) A TV transmitter/"transmitting station" for transmitting the combined information signal as an RF combined information transmission.

B) Murasaki et al.: Figure 2 on page 100 in Murasaki et al. has been cited as representing a more detailed illustration of the same conventional TV transmitter system structure that was shown in McArthur. This more detailed illustration evidences that it was notoriously well known in the art for said TV transmitter systems to have comprised:

- 1) The same television studio structure (i.e. the labelled "Television System") for producing and providing said "television signal" that was to be transmitted from the transmitter station, wherein Murasaki et al. specifically shows that it was conventional for the provided "television signal" to have taken the form of separate "audio" and "video" components;
- 2) The same teletext editing suite (e.g. the labelled "Data Signal Generator" and "Signal Processor") for producing and providing said teletext "data" that was to be transmitted by the transmitter station;

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3) The same teletext data inserter (e.g. the labelled "Mixer") for inserting the provided teletext "data" into the VBI of the provided television signal, wherein Murasaki et al. specifically shows the produced teletext "data" being insterted into the VBI of the "video" component of the provided television signal to produce a combined video component while the "audio" component of the provided television signal is passed directly to the transmitter;

4) The same TV transmitter/transmitting station (i.e. the illustrated "VHF TV Transmitter") for transmitting the combined information transmission, wherein Murasaki et al. specifically shows the transmitter received the combined video component and provided audio component and transmits the components as a single/conventional combined RF TV signal transmission.

II. The Showing of Davies [US #3,627,914]:

Davies has been cited as being illustative of conventional automated television studio structure often used to implement the "television studio" of McArthur and Murasaki et al. (cited above). Specifically, figure 1 of Davies shows that it was conventional for the "television studio" to have comprised:

- 1) a plurality of video component sources (e.g. @ 60, '62, 64);
- 2) a plurality of audio sources (e.g. @ 70, 72);
- 3) computer controlled "video" component switching and mixing circuitry (e.g. @ 42, 58, 66, 68);
- 4) computer controlled "audio" component switching and mixing circuitry (e.g. @ 48, 74);
- 5) a real time clock (e.g. 26) for tracking the time of day;
- 6) input circuitry (e.g. 12, 14) for enabling a video/audio component switching schedules to be entered into the memory (e.g. 10) of a computer;
- 7) the computer (e.g. @ 10, 16, 18, 20, 22, 24, 28, 32) for generating control signals for controlling the switching and mixing circuitry according to the stored switching schedules based on the time of day from the real time clock; wherein

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the television studio provides a television signal output, comprised of respective video ("VIDEO OUT") and audio ("AUDIO OUT") signal components, for transmission by a transmitter.

III. The Showing of Green et al.:

Green et al. has been cited as being illustrative of the conventional teletext editing suite structure and operation that was actually used to implement the teletext "editing suite" circuitry of McArthur and Murasaki et al. (cited above). Specifically, Green et al. shows that it was conventional for the teletext "editing suite" to have comprised:

- 1) A disc store for storing many pages of teletext data;
and
- 2) A computer for controlling the retrieval and transmission of selected ones of the stored pages of teletext data according to an entered transmission schedule based on the time of day that is tracked by real time clocking circuitry [note the discussion on page 25 of Green et al.].

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Davies [US #3,627,914].

As was discussed in paragraph 5 above, Davies has been cited because it illustrates conventional automated "television studio" structure that was used to within the implementation of conventional TV transmitter stations. More specifically, as is shown in figure 1, Davies disclosed a transmitter station structure that comprised:

- 1) Circuitry (@ 14 and or 12) for inputting a schedule (e.g. figure 2) to the memory (10) of a "computer" device (e.g. note lines 17-22 of column 1), wherein the inputted schedule included a time to transmit mass medium "audio" and/or "video" programming (e.g. such that listed under the "audio full" column of figure 2);
- 2) The computer device (e.g. @ 10, 16, 18, 20, 22, 24, 28, 32) which selected supplementary background audio information (e.g. such as that listed under the "audio under" column of figure 2) to be associated with the mass medium programming based on the inputted schedule (e.g. note lines 71-75 of column 2);
- 3) Circuitry (e.g. illustrated as "real time clock" 26) having a "content" that is outputted and "passed" as a real time clock "control signal" to comparator (24) of the computer; wherein said passed control signal designates, via the inputted and stored schedule of figure 2, both the mass medium programming and the information that is to be associated with the mass medium programming;
- 4) The computer device (e.g. @ 10, 16, 18, 20, 22, 24, 28, 32) which outputs control signals (@ 32) for controlling a selective transmission device (e.g. @ 48) to communicate the background audio information to a signal generator (e.g. @ 74);

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5) The signal generator (e.g. @ 74) for mixing the mass medium audio programming with the background audio programming to generate a mixed audio output signal containing both said the mass medium audio programming with the background audio programming at the illustrated "audio output"; and

6) While not explicitly shown in the figure, a transmitter which is connected to receive and transmit the video and audio outputs of the illustrated television studio structure of figure 1 (i.e. the signals @ "VIDEO OUT" and "AUDIO OUT") to remote receiver stations.

While not explicitly stated in Davies, the "presence" of the "content" within time clock (26) inherently had to have been "detected" before it could have been "outputted" regardless of how said "content" was derived (regardless of whether the "content" was free-running or locked to some outside source).

8. Claims 5, 9, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Davies [US #3,627,914] for the reasons set forth for claim 2 above.

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9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davies [US #3,627,914] in view of the article "Automatic Storage and Retrieval of Videotaped Programs" by Kazama et al. and/or the document by Kamashima et al. [JP 56-51161].

In the section 102 rejection of claim 2 set forth above, the real time clock control signal of the prior art was used to meet the "control signal" recitations of the claim. In contrast, instantly, the publications by Kazama et al. and/or Kamashima et al. will be relied upon to meet the "control signal" such recitation.

As was set forth above, Davies has been cited because it illustrates conventional automated "television studio" structure that was used to implement conventional TV transmitter stations. More specifically, as is shown in figure 1, Davies disclosed a transmitter station structure that comprised:

- 1) Circuitry (@ 14 and or 12) for inputting a schedule (e.g. figure 2) to the memory (10) of a "computer" device (e.g. note lines 17-22 of column 1), wherein the inputted schedule included a time to transmit mass medium "audio" and/or "video" programming (e.g. such that listed under the "audio full" column of figure 2);
- 2) The computer device (e.g. @ 10, 16, 18, 20, 22, 24, 28, 32) which selected supplementary background audio information (e.g. such as that listed under the "audio under" column of figure 2) to be associated with the mass medium programming based on the inputted schedule (e.g. note lines 71-75 of column 2);
- 3) The computer device (e.g. @ 10, 16, 18, 20, 22, 24, 28, 32) which outputs control signals (@ 3) for controlling a selective

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transmission device (e.g. @ 48) to communicate the background audio information to a signal generator (e.g. @ 74);

4) The signal generator (e.g. @ 74) for mixing the mass medium audio programming with the background audio programming to generate a mixed audio output signal containing both said the mass medium audio programming with the background audio programming at the illustrated "audio output"; and

5) A transmitter (not shown) which is connected to receive and transmit the video and audio outputs of the illustrated television studio structure of figure 1 (i.e. the signals @ "VIDEO OUT" and "AUDIO OUT") to remote receiver stations.

Within the automated transmission station environment of Davies, Kazama et al. has been cited as evidencing the fact that it was known to have coded the recorded programming with program identifying "control signals" which would be: detected from the tape; passed to the control computer, and compared to the stored transmission schedule in order to determine whether the controlled playback devices were properly loaded with the programming that was scheduled for automated retrieval/broadcast. This feature advantageously provided the station with a way to prevent transmission errors caused by the improper loading of the playback devices by the operator [see the paragraph that begins in the middle column on page 223 of the publication]. Likewise, within the same environment, Kamishima et al evidences the fact that it was known to have embedded similar program identifying signals within the VBI of all of the programming to be transmitted thereby allowing the switching computer to monitor the output of the program switcher(s), compare the monitored output with the stored schedule, so as to confirm the proper operation of the program switching/sequencing too.

Given the teachings of Kazama et al. and Kamishima et al, the examiner maintains that it would have been obvious to one of ordinary skill in the art to have coded the programming that was to be broadcast within the automated switching system disclosed by Davies with program identifying control which would be monitored by the switching computer, compared to the stored broadcast schedule, and used advantageously to prevent the various types of transmission errors described in Kazama et al. and/or Kamishima et al.

11. Claims 5, 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies [US #3,627,914] in view of the article

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"Automatic Storage and Retrieval of Videotaped Programs" by Kazama et al. and Kamashima et al. [JP 56-51161] for the same reason that was set forth for claim 2 above.

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davies [US #3,627,914], Green et al., McArthur and Murasaki et al.

For the reasons discussed in paragraph 5 of this Office action, it is maintained that the showings of McArthur and Murasaki et al. evidence the obviousness of having used the conventional teletext editing suite described in Green et al. to provide scheduled pages of teletext data for insertion into the VBI of the video component of the studio television signal wherein, as was known in the art, the studio television signal was provided from an automated television studio of the type disclosed by Davies [note the caption for figure 4 in Green et al. too]. The resulting transmitter configuration comprised:

- 1) Circuitry (14 and 12 in figure 1 of Davies) for inputting a transmission schedule (figure 2 of Davies) to the memory (10 in figure 1 of Davies) of a "computer" device (e.g. note lines 17-22 of column 1 of Davies), wherein the inputted schedule included a time to output the audio and video components of mass medium television programming;
- 2) The teletext editing suite described by Green et al. (e.g. note page 25) which operated to select and schedule pages of teletext information for transmission within the VBI of the video component of the scheduled mass medium television programming outputted by the television studio of Davies, wherein at least some of these selected pages of teletext information are "program related information" (see second column on page 30 of Green et al.) and therefor must be selected, e.g. scheduled for transmission, based on the scheduled television programming with which it is associated;
- 3) Circuitry (e.g. real time clock 26 of Davies) for detecting and passing a real time clock control signals the comparator (24 of Davies) of the computer wherein said passed control signal designates, based on the inputted and stored schedule in figure 2 of Davies, the mass medium programming that is to be outputted from the studio at any given time;

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4) A selective transmission device that is controlled to communicate the selected information that is to be associated with the mass medium programming (e.g. figure 4 of Green et al.);

5) A teletext inserter (e.g. the "Mixer" shown in figure 2 of Murasaki et al.) for generating a combined signal containing the mass medium programming and the the information that is to be associated with said mass medium programming; and

6) A transmitter (e.g. the "TV Transmitter" shown in figure 2 of Murasaki et al.).

13. Claims 5, 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies [US #3,627,914], Green et al., McArthur and Murasaki et al. for the same reasons that are set forth for claim 2 above.

14. Appendix IV of this Office action provides a summary of what the examiner considers to be the "more" pertinent of the prior art of record. Further:

A) Bedford [US Patent #2,164,297] has been cited because it shows a system in which local advertising could be inserted into a corner of a broadcasted TV programming;

B) The 1980 publication "controlling Cable TV Head Ends and Generating Messages by Means of a Micro Computer by Scholoss et al. (Omega Communications, Inc.) has been cited because it described a system in which the computer at an intermediate station could be loaded fro a remote location with new advertisements [note the first 10 lines under section 5.0];

C) Briskman [US Patent #3,825,837] has been cited because it illustrates an intermediate switching stations (@ figure 1) whose local switching signals originate from a local or remote station

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via a "stored program" [e.g. lines 33-40 of column 1 and lines 10-21 of column 3]; and

D) Lambert [US Patent #4,381,522] illustrates and intermediate TV station (figure 1) whose switching (@ 24) is controlled by a program schedule which has been generated and stored within a computer (11), wherein at least some of the programming that is received/switched comes from external program sources (@ 26).


15. The "prior art" of record has been applied to the claims to the extent of the examiner's understanding given the cited section 112-problems.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E HARVEY whose telephone number is (703) 305-4365. The examiner can normally be reached on M-F from 9 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


DAVID E HARVEY
Primary Examiner
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APPENDIX I [1981 priority]

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A. Applicants' claim to the 1981 priority date under Section 120, whenever alleged, should be based on the "adequate written description" requirement of Section 112-1 which has been incorporated into Section 120 (as opposed to being improperly based on the "anticipation" standard provided for under Section 102):

1) Section 120 provides a tool whereby a second application is entitled to the earlier filing date of a first application with, and only with, respect to "common subject matter." That is, the filing date of the first application is preserved in the second application for that subject matter described in the second application that was previously described in the first application. Section 120 does not provide an avenue whereby the subject matter described in the first application is magically carried forward into the written description of the second application (i.e. the written description of the second application must incorporate the description from the first application either physically or by reference). Nor does section 120 provide an avenue for surreptitiously adding new matter to an existing written description without the loss of the original filing date with respect to the added "new matter." ¹

"Section 120 merely provides mechanism whereby application becomes entitled to benefit of filing date of earlier application disclosing same subject matter; common subject matter must be disclosed in both applications, either specifically or by express incorporation by reference of prior disclosed subject matter; nothing in Section 120 itself operates to carry forward earlier application; it contains no magical disclosure -- augmenting powers able to pierce new matter barriers; therefor, it cannot "limit" absolute and express prohibitions against new matter contained in Section 251."

[Dart Industries, Inc. v. Banner, Commissioner of Patents and Trademarks, (CA DC), 207 USPQ 273]

It is unclear as how much (if any) of the subject matter that was described in the 44 pages of applicant's 1981 parent application was actually carried forward into the 557 pages of the instant 1987 CIP specification in a form that does not

¹ Wherein "new matter" is, by definition, "matter involving a departure from or in addition to the original disclosure" [37 C.F.R. 1.118]

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constitute "new matter"; new matter being, by definition, "matter involving a departure from or in addition to the original disclosure". That is, it is unclear as to which (if any) of the currently pending claims are directed solely to subject matter from the 1981 specification that was actually carried forward into the instant 1987 specification. The reason for all the confusion stems from the fact that:

- (1) The 1981 parent specification was not incorporated into the 1987 specification formally or in any immediately discernible fashion;
- (2) Those portions of the 1987 descriptions which look as though they might have originated from the 1981 parent specification have themselves been so thoroughly intermixed with new 1987 subject matter during their migration to the 1987 specification that they too appear to constitute "new matter"; and
- (3) Applicants make no attempt to show that any of the pending claims are directed solely to subject matter described in the instant 1987 CIP specification that was previously described in their 1981 parent specification; i.e. to prove that the subject matter now being claimed is in fact "common subject matter". Instead, applicants have elected:
 - (a) To submit parallel 1981 and 1987 citations of alleged section 112-1 support for each of the claim in question, wherein these parallel 1981 and 1987 citations point to vastly different 1981 and 1987 subject matter from the 1981 parent and 1987 CIP specifications; and
 - (b) To argue that the examiner's position concerning the need for a showing of "common subject matter" under section 120 to be wrong.

That is, all of applicants attempts to establish section 120 "priority" back to the 1981 parent specification for the pending amended claims in question, appear to be based on an erroneous standard. Namely, applicant's have presented showings that do not address or even attempt to present the actual proof that is needed to establish priority under section 120 [e.g. note part "2)" of this Appendix]. However, providing a showing that meets the requirements of section 120 is a "burden" that falls to applicant (and

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not the examiner) whenever "priority" under section 120 is alleged by the applicant.

"A party who, like Hiraga, relies on an earlier-filed application under 35 U.S.C. 119 or 120 has the burden to show that the foreign or patent application supports later-added claims under 35 U.S.C. 112-1"

[Utter v. Hiraga 6 USPQ 2d 1709, 1713 (Fed. Cir. 1988)]

2) Applicants continue to allege that the written description requirement of section 112-1, e.g. that which has literally been incorporated into section 120, permits applicants to obtain priority to the 1981 effective filing date of the parent application by demonstrating that each pending amended claim, i.e. each claim that for which the 1981 date is sought, can be given respective 1987 and 1981 claim interpretations which permit the claim to be read, separately, on different 1987 and 1981 subject matter from the different 1987 and 1981 specifications. Specifically, applicants have taken the positions: (1) that there is nothing in Section 120 which requires the respective 1987 and 1981 written descriptions being relied upon for establishing "priority" to be the same and/or equivalent; and (2) that, being such, it is improper for the examiner to compare the respective 1981 and 1987 disclosures being relied upon to determine whether or not it is "common subject matter".

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim." (emphasis added)

[Page 141 of applicant's response filed on 1/28/2002 in application S.N. 08/470,571]

"Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third

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element of the test whereby the § 112 support from each application consists of 'common subject matter.'"

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

The examiner continues to disagree with applicants' positions. Specifically, the examiner notes:

(A) That the need to compare the disclosure of the CIP application with that of the parent application, to ensure that "common subject matter" is being claimed, is a necessary inquiry that must be made when determining the validity of an allegation to "priority" made under section 120.

"The Inquiry required by section 120 demands a comparison of 1) the claims of the parent and CIP applications and 2) any other disclosures made in the applications such as specification and drawing. Acme Highway, supra, at 1079, 167, USPQ at 132-33."

[Stern v. Superior Distributing Company et al., (CA 6), 215 USPQ 1089 at 1094]

(B) That, in taking the positions cited above, applicants appear to have confused the showing that is needed for "anticipation" under section 102 (where a showing of "common subject matter"/"the same invention" is not required) with the showing that is needed to establish "priority" to an earlier filing date under section 120 (where a showing of "common subject matter"/"the same invention" is required).

(C) The mere fact that a claim can be broadly drafted in a subsequent CIP application so as to "generically" read on subject matter from an earlier filed parent application (i.e. to be "anticipated" within the meaning of section 102) does not necessarily mean that said claim is entitled to the earlier filing date of the parent [note: Tronzo v. Biomet Inc., (CA FC), 47 USPQ2d 1829]. Hence, applicants' parallel citations of alleged claim support that are based on different 1987 and 1981 subject matter, at best, only established the fact that the claims are "anticipated" by the respective 1981 and 1987 disclosures in a section 102 sense. The parallel citations do not establish the fact that the claims are supported by "common subject matter" found in both specifications as is actually required for section 120 priority.

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3) Throughout the present prosecution, the examiner has noted many differences and *inconsistencies* that exist between applicants' instant 1987 CIP specification and applicants' 1981 parent specification. For example: all of the "systems and methods" that are described in the 1987 disclosure utilize 1987 "control and instruct signaling" that conveys an "expanded"/broadened range of information including, most significantly, downloadable software; b) The meaning and definitions explicitly given to terminology that is used to describe the 1987 systems/methods in the 1987 specification has itself been "expanded"/broadened with respect to the same terminology used to describe the 1981 systems/methods in the 1981 disclosure, thereby *quietly* imparting "expanded"/broadened meaning to most (if not all) of the 1987 descriptions [e.g. terms such as "programming", signal "words", etc. ...]; c) **All** of the 1987 systems/methods utilize the more advanced 1987 "SPAM" transmission packet technology which enables the 1987 systems and methods to dynamically transport carry the "expanded"/broader form 1987 "control and instruct signals" (i.e. "software"), and enables the 1987 systems/methods to operate within a "expanded"/broader range of disclosed communication system environments [i.e. the 1987 systems and methods are explicitly described within environments outside radio and television whereas the previously described 1981 systems/methods were not). These "expanded"/broadened descriptions expand and broaden the descriptions of **all** of the 1987 systems/methods within the instant 1987 CIP specification to a point where the 1987 descriptions themselves appear to constitute "new matter" (with respect to the 1981 parent). The following is noted:

"New matter is matter involving a departure from or in addition to the original disclosure"

[37 C.F.R. 1.118]

"To the extent that a CIP application adds new matter, claims that are dependent upon the new matter are entitled to the filing date of the CIP only and not that of the parent application"

[Stern v. Superior Distributing Company et al., (CA 6), 215 USPQ 1089 at 1094]

"A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the substance of the invention or makes the composition an invention for the first time, as opposed to the situation in which the subsequent application merely contains either a language change not effecting the

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meaning of the prior application or a specification which narrows the scope of that which was previously claimed.

[Indiana General Corp. v. Krystinel Corp., 161 USPQ 82, 94-95]

And, because the specification of the 1981 parent application was not carried forward during the drafting of the 1987 CIP, it is the "new" written description of the 1987 CIP systems and methods alone which must describe that which is now claimed in accordance with requirements of 112-1; i.e. necessarily making that which is now claimed the much improved/enhanced/expanded 1987 systems and methods of the 1987 CIP specification. Why should/would these improved/enhanced/expanded 1987 CIP systems and methods be entitled to the 1981 filing date of the lesser 1981 systems and methods whose descriptions were literally left behind during the drafting of the instant 1987 CIP specification? In any event, by electing to leave the 1981 written description behind during the drafting of the instant 1987 CIP, applicants have not only forfeited their right to now claim any 1981 subject matter that is determined not to have been carried forward into the 1987 CIP, but applicants have made "their" burden of establishing proof of section 120 priority a heavy one indeed. That is, by failing to incorporate the 1981 description into the 1987 CIP application, applicants need to prove (as opposed to allege) that that which is now claimed is directed solely to 1981 systems and methods from the discarded 1981 specification whose descriptions have actually been carried forward into the 1987 CIP.

4) In reviewing case law, one finds that the courts have warned everyone again and again not to confuse the issue of "anticipation" under section 102 with the issue of adequate "written description" under section 112-1 as incorporated into section 120. To this point, when current applicants show that the recitations of a given claim can be separately read on different subject matter from their two very different 1987 and 1981 specifications², applicants have at best only established the fact that the given claim's recitations are in some way "anticipated" by different 1987 and 1981 subject matter. Such a showing fails to establish priority under section 120. Namely, applicants have failed to establish, as fact, that the "subject matter" being claimed comprises "common subject matter" that is

² i.e. the instant 1987 CIP disclosure and the past 1981 disclosure of the parent.

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"adequately described" in accordance with section 112-1 by both the 1987 and the 1981 disclosures:

"However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications" (emphasis added)

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

"Any claim in a continuation-in-part application that is directed solely to subject matter adequately disclosed under 35 U.S.C. 112 in the parent application is entitled to the filing date of the parent application."

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

"Assuming the common inventorship, copendency, and cross-reference required by section 120, that section further requires only that the invention be disclosed in the parent application in such manner as to comply with the first paragraph of section 112 and be the same invention as that disclosed in the later application." (emphasis added)

[*Kirschner*, 305 F.2d 897 (C.C.PA1962)]

5) Again, turning to the case law, it is also quite apparent that whenever a claim for priority under section 120 is made to an earlier filed application in a Continuation-In-Part (CIP) application, the validity of the claim is determined in the following manner:

A) First, the court turns to the disclosure of the CIP application in order to determine precisely what the "subject matter" is that is being claimed. Namely, in accordance with section 112-1, the CIP disclosure must provide a "description" of that which is being claimed by the claims in the CIP application and, therefor, the court turns to said CIP specification to locate the required description of that which is claimed; and

B) Having determined from the CIP application precisely what the *described* "subject matter" is that is being claimed, the court then turns to the disclosure of the parent application to determine whether this same "subject matter" was previously described in disclosure of the parent application in the same or equivalent fashion. Only if the answer to this

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determination is "yes" is priority to the filing date of the parent accepted/established.

As can be seen, the process used by the courts effectively compares the disclosure of the CIP application with the disclosure of the parent application to ensure that the invention that is described/claimed in the CIP application is the same subject matter that was previously described in the parent application.

"The inquiry required by section 120 demands a comparison of 1) the claims of the parent and CIP applications and 2) any other disclosures made in the applications such as specification and drawing. Acme Highway, supra, at 1079, 167, USPQ at 132-33."

[Stern v. Superior Distributing Company et al., (CA 6), 215 USPQ 1089 at 1094]

The above process/standard applied by the courts is, however, far different from the process/standard/showings put forth by applicants. According to applicants, one establishes section 120 priority by *blindly* identifying separate 1987 and 1981 grounds of alleged "claim support" wherein the respective grounds of claim support may be based on vastly different subject matter described in the respective specifications:

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim."
(emphasis added)

[Page 141 of applicant's response filed on 1/28/2002 in application S.N. 08/470,571]

"Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of 'common subject matter.'"

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

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Unfortunately, it appears that applicants have failed to heed the warnings of the court and have confused the issue of "anticipation" under section 102 (i.e. where a showing of "common subject matter" is not required) with the issue of "adequate written description" of section 112-1 as literally incorporated into section 120 (i.e. where a showing of "common subject matter" is unquestionably required).

6) Again, applicants take the position that there is nothing in section 120 which requires the respective 1987 and 1981 written descriptions relied upon to be the same and/or equivalent.

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim."

(emphasis added)

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If such a position were true, then there would be nothing in the law to prevent an inventor from "surreptitiously expanding a patent" through the filing of one or more CIP applications. Indeed, in such a world, one could describe and claim the proverbial "apples" in a later filed CIP application and obtain the earlier filing date of a parent application which only described the proverbial "oranges" via nothing more than the act of creative claim construction [i.e. as was noted in the *Interview Summary* of 6/29/00 (paper # 27) in SN 08/487,526]. However, preventing an inventor from improperly using section 120 in this fashion is one of the historical reasons why the "adequate written description" requirement of section 112-1 was incorporated into section 120 in the first place: e.g.

"Unlike the enablement provision of section 112, where the disclosure of a single species might be sufficient to enable a practitioner skilled in the art to make and use any member of the genus,....., the written description requirement of section 112 requires more. See Vas - Cath, supra. This strict reading of the written description requirement prevents an inventor from surreptitiously expanding a patent

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through successive continuation-in-parts. See id. At 1562.

Essentially, it limits the claims of an applicant to those inventions he clearly discloses, either expressly or inherently" (emphasis added).

[Tronzo v. Biomet Inc. (DC SFla) 41 USPQ2d 1403 ³ citing Vas-Cath Inc. v. Mahurkar (CA FC) 19 USPQ2d 1111]

"Section 120 merely provides mechanism whereby application becomes entitled to benefit of filing date of earlier application disclosing same subject matter; common subject matter must be disclosed in both applications, either specifically or by express incorporation by reference of prior disclosed subject matter; nothing in Section 120 itself operates to carry forward earlier application; it contains no magical disclosure -- augmenting powers able to pierce new matter barriers; therefor, it cannot "limit" absolute and express prohibitions against new matter contained in Section 251."

[Dart Industries, Inc. v. Banner, Commissioner of Patents and Trademarks, (CA DC), 207 USPQ 273]

"A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the substance of the invention or makes the composition an invention for the first time, as opposed to the situation in which the subsequent application merely contains either a language change not effecting the meaning of the prior application or a specification which narrows the scope of that which was previously claimed. [Indiana General Corp. v. Krystinel Corp., 161 USPQ 82, 94-95]

The courts have also indicated the following:

"To be entitled to the filing date of a previously filed application, appellant's application on appeal would have to satisfy the

³ NOTE: this case was appealed [Tronzo v. Biomet (CA FC) 47 USPQ2d 1829]

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requirements of 35 U.S.C. 120, among which is the requirement that the subject matter now claimed be disclosed in a manner prescribed by the first paragraph of section 112 in the prior application. Since, to conform to section 112, claimed subject matter must be described in the specification relied upon, subject matter which is first introduced in a continuation-in-part application is not entitled to the filing date of the parent application"

[In re van Langenhoven, 173 USPQ 426 (CCPA 1972)]

"[The] bottom line is that, no matter what term is used to describe a continuing application, that application is entitled to the benefit of the filing date of an earlier application only as to common subject matter" [Transco Products Inc. v. Performance Contracting Inc. (CA FC) 32 USPQ2d 1077)].

"In terms of the statute, 35 U.S.C. 120, this means that, for an application to be entitled to the benefit of the date of a previously filed, copending application such application must contain a written description of the invention claimed in the second application which complies with the first requirement of the first paragraph of 35 U.S.C 112 However, as we said in In re Lukack,, 'the invention claimed [in the later application] does not have to be described [in the parent] in *ipsis verbis* in order to satisfy the description requirement of 112' The question in cases in which the parent application does *not* contain language contained in the claims of the later application is whether the language which *is* contained in the parent application is the legal equivalent of the claim language, in the sense that the '*necessary and only reasonable* construction to be given the disclosure [in the parent application] by one skilled in the art' is the same as the construction which such person would give language in claims of the later application." [WAGONER AND PROTZMAN v. BARGER AND HAGGERTY, 175 USPQ 85, 86 (CCPA 1972)].

"It must be understood that the introduction of a new best mode disclosure would constitute the injection of 'new matter' into the application and automatically deprive the applicant of the benefit of the

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earlier filing date of the parent or original application for any claim whose validity rests on the new mode disclosure"

[Transco Products Inc. v. Performance Contracting Inc. (CA FC) 32 USPQ2d 1077, 1083)]

In Vas-Cath Inc. v. Mahurkar (CA FC) 19 USPQ2d 1111, 1114, it was noted that one might be inclined to question the purpose of a separate written description requirement of section 112 in view that "the invention" is in fact the subject matter that is defined by the *claims* being considered:

"One may wonder what purpose a separate "written description" requirement serves, when the second paragraph of § 112 expressly requires that the applicant conclude his specification "with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."

Reasons for having the separate descriptive requirement, as noted in In Vas-Cath Inc. v. Mahurkar (CA FC) 19 USPQ2d 1111, 1115, included the following:

1) An adequate written description of the invention provides a "warning an innocent purchaser, or other person using a machine, of his infringement of the patent;

and at the same time taking from the inventor the means of practicing upon the credulity or fears of other persons, by pretending that his invention is more than what it really is, or different from its ostensible objects, that the patentee is required to distinguish his invention in his specification"; and

2) An adequate written description of the invention "guards against the inventor's overreaching by insisting that he recount his invention in such detail that his future claims can be determined to be encompassed within his original creation."
[Vas-Cath Inc. V. Mahurkar (CA FC) 19 USPQ2d 1115]

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"The purpose of the 'written description' requirement is broader than to merely explain how to 'make and use'; the applicant must also convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the 'written description' inquiry, whatever is now claimed" [Vas-Cath Inc. V. Mahurkar (CA FC) 19 USPQ2d 1117].

"Lockwood argues that the district court erred by looking solely at the applications themselves. We do not agree. It is the disclosures of the applications that count. Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. It extends only to that which is disclosed" (emphasis added)

[Lockwood v. American Airlines Inc. (CA FC) 41 USPQ2d 1961, 1966]

"Lockwood argues that all that is necessary to satisfy the descriptive requirement is to show that one is 'in possession' of the invention. Lockwood accurately states the testbut fails to state how it is satisfied. One shows that one is 'in possession' of the invention by describing the invention, with all its claimed limitations, not that which makes it obvious. *Id.* ('[T]he applicant must also convey to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention . The invention is, for purposes of the 'written description inquiry' whatever is now claimed.'). One does that [i.e. describes the invention] by such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the invention. Although the exact terms need not be used in haec verba,the specification must contain an equivalent description of the claimed subject matter. A description which renders obvious the invention for which an earlier filing date is sought is not sufficient"

[Lockwood v. American Airlines Inc. (CA FC) 41 USPQ2d 1961, 1966]

"Thus the earlier application must meet the written description requirement of Section 112. The test for sufficiency of the written description is the same, whether for a design or utility patent. This test

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has been expressed in various ways; for example, 'whether the disclosure of the application 'reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter'.....*When the earlier disclosure is less than clear on its face, courts have explained that the prior application must necessarily have described the later claimed subject matter*"

(emphasis added)

[In re Daniels (CA FC) 46 USPQ2d 1790]

"It is insufficient as written description, for purposes of establishing priority of invention, to provide a specification that does not unambiguously describe all limitations of the count"

[Hyatt v. Boone (CA FC) 47 USPQ2d 1128]

"Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. It extends only to that which is disclosed. While the meaning of terms, phases, or diagrams in a disclosure is to be explained or interpreted from the vantage point of one skilled in the art, all limitations must appear in the specification. The question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification. Rather, a prior application itself must describe an invention, and do so in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought"

[Lockwood v. American Airlines Inc. (CA FC) 41 USPQ2d 1961, 1966]

7) The original specification of the instant application is the same as the specification of applicants' 1987 parent CIP application. Thus, to establish a 1987 priority date for that which is currently claimed under section 120, applicants need only establish the fact that there was adequate section 112-1 support in the instant 1987 CIP disclosure for *the invention* that is now claimed. However, the same is not true of the alleged 1981 priority date. Specifically, the 1987 CIP specification is not the same as the 1981 specification nor has the

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1981 specification been incorporated into the 1987 CIP in any immediately discernible fashion. The mere fact that the 1987 CIP application specifically identifies itself as being a CIP application of one having the 1981 specification, is not sufficient to incorporate any part of the 1981 specification thereto. The 1981 specification itself has therefor been left behind in the drafting and filing of the 1987 CIP. What this means in term of priority under section 120, is that the currently pending claims are only entitled to the 1981 priority date if it can be determined that they recite an invention that was not only described in the instant 1987 specification, but that was also described 1981 parent specification.

"Applicant is confusing two distinctly different things:

(1) the right to have benefit of the filing date of an earlier application under § 120 for subject matter claimed in the later application because that subject matter is *disclosed in an earlier application* to which a 'specific reference' is made - i.e., a reference to the earlier application per se, and

(2) the incorporation *by reference* in an application of matter elsewhere written down (not necessarily in a patent application), for economy, amplification, or clarity of exposition, by means of an incorporating statement clearly identifying the subject matter which is incorporated and where it is to be found"

[In re DE SEVERERSKY, 177 USPQ 146 (CCPA 1973)]

"Statement in application that it is 'continuation-in-part' of prior application is insufficient to incorporate therein any part of prior application; all that it means is that insofar as disclosure of application finds corresponding disclosure in prior application, the application is entitled to filing date of prior application"

[In re DE SEVERERSKY, 177 USPQ 144 (CCPA 1973)]

"All it means insofar as the *disclosure of the parent* finds corresponding disclosure in the grand parent, the parent is entitled to the filing date of the grand parent. 35 U.S.C. 120"

[In re DE SEVERERSKY, 177 USPQ 146 (CCPA 1973)]

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"Section 120 merely provides mechanism whereby application becomes entitled to benefit of filing date of earlier application disclosing same subject matter; common subject matter must be disclosed in both applications, either specifically or by express incorporation by reference of prior disclosed subject matter; nothing in Section 120 itself operates to carry forward earlier application; it contains no magical disclosure – augmenting powers able to pierce new matter barriers; therefor, it cannot "limit" absolute and express prohibitions against new matter contained in Section 251."

[Dart Industries, Inc. v. Banner, Commissioner of Patents and Trademarks, (CA DC), 207 USPQ 273]

More specifically, because the 1981 specification was discarded in the drafting of the 1987 CIP, applicants' currently pending amended claims would only be entitled to the 1981 priority date if applicant's can show/prove that they are directed to an invention that was described in both the 1987 and 1981 specifications; i.e. the claimed invention must be shown to comprise "common subject matter". Being such, if a currently pending claim is necessarily directed to so much as a *smudge* of "new matter"⁴, i.e. subject matter introduced via the filing of the 1987 CIP specification, said claim is not entitled to the 1981 priority date:

"Unlike the enablement provision of section 112, where the disclosure of a single species might be sufficient to enable a practitioner skilled in the art to make and use any member of the genus,....., the written description requirement of section 112 requires more. See *Vas - Cath, supra*. This strict reading of the written description requirement prevents an inventor from surreptitiously expanding a patent through successive continuation-in-parts. See *id.* At 1562. Essentially, it limits

⁴ Wherein "new matter" is, by definition, "matter involving a departure from or in addition to the original disclosure" [37 C.F.R. 1.118]

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the claims of an applicant to those inventions he clearly discloses, either expressly or inherently" (emphasis added)

[Tronzo v. Biomet Inc. (DC SFla) 41 USPQ2d 1403 ⁵ citing Vas-Cath Inc. v. Mahurkar (CA FC) 19 USPQ2d 1111]

"To be entitled to the filing date of a previously filed application, appellant's application on appeal would have to satisfy the requirements of 35 U.S.C. 120, among which is the requirement that the subject matter now claimed be disclosed in a manner prescribed by the first paragraph of section 112 in the prior application. Since, to conform to section 112, claimed subject matter must be described in the specification relied upon, subject matter which is first introduced in a continuation-in-part application is not entitled to the filing date of the parent application"

[In re van Langenhoven, 173 USPQ 426 (CCPA 1972)]

"A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the substance of the invention or makes the composition an invention for the first time, as opposed to the situation in which the subsequent application merely contains either a language change not effecting the meaning of the prior application or a specification which narrows the scope of that which was previously claimed. [Indiana General Corp. v. Krystinel Corp., 161 USPQ 82, 94-95]

"However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications" (emphasis added)

[In Transco Products, Inc., v. Performance Contracting, Inc., 32 USPQ2d 1077 [**18]]

⁵ NOTE: this case was appealed [Tronzo v. Biomet (CA FC) 47 USPQ2d 1829]

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"Any claim in a continuation-in-part application that is directed solely to subject matter adequately disclosed under 35 U.S.C. 112 in the parent application is entitled to the filing date of the parent application."

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

"Assuming the common inventorship, copendency, and cross-reference required by section 120, that section further requires only that the invention be disclosed in the parent application in such manner as to comply with the first paragraph of section 112 and be the same invention as that disclosed in the later application." (emphasis added)

[*Kirschner*, 305 F.2d 897 (C.C.PA1962)]

"Lockwood argues that all that is necessary to satisfy the descriptive requirement is to show that one is 'in possession' of the invention. Lockwood accurately states the testbut fails to state how it is satisfied. One shows that one is 'in possession' of *the invention* by describing *the invention*, with all its claimed limitations, not that which makes it obvious. *Id.* ('[T]he applicant must also convey to those skilled in the art that, as of the filing date sought, he or she was in possession of *the invention* . The invention is, for purposes of the 'written description inquiry' whatever is now claimed.One does that [i.e. describes *the invention*] by such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the invention. Although the exact terms need not be used in haec verba,the specification must contain an equivalent description of the claimed subject matter. A description which renders obvious the invention for which an earlier filing date is sought is not sufficient"

[*Lockwood v. American Airlines Inc.* (CA FC) 41 USPQ2d 1961, 1966]

"Lockwood argues that the district court erred by looking solely at the applications themselves. We do not agree. It is the disclosures of the applications that count. Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. It extends only to that which is disclosed"

(emphasis added)

[*Lockwood v. American Airlines Inc.* (CA FC) 41 USPQ2d 1961, 1966]

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8) Applicants' position pertaining to the requirements of Section 120 priority does not appear to make sense. Specifically, applicants' position, if accepted, means that a significant advantage is bestowed on inventors who are willing to file CIP applications. Namely, in such a world, an inventor can describe and claim invention B in a later filed CIP application, and yet obtain the earlier filing date of a different invention A that was described in an earlier filed parent application for invention B, simply by drafting quasi-generic claims in the CIP application having limitations that are "anticipated" by the descriptions of invention A in the parent application. Clearly, the purpose of Section 120 was to allow an applicant to file a later "continuing" application while **preserving** the earlier filing date of the parent application for that subject matter, and only that subject matter, that was disclosed in the earlier filed parent. The purpose of Section 120 was not to provide filers of CIP applications advantages over non-filers of CIP applications; i.e. such as the right to an earlier filing date for a later filed invention. To the contrary, as has been addressed above, Section 112-1 was specifically incorporated into Section 120 for the purpose of ensuring that filers of CIP applications were not bestowed with such "advantages".

9) The courts have made it clear that, under section 120, the subject matter described and claimed in a CIP application does not have to be described the same way in a parent application to be entitled to the filing date of the parent application; e.g.

"A continuation-in-part application, by definition, contains a substantial portion or all of the earlier application plus additional, previously undisclosed subject matter. A mere embellishment, or technical improvement, of features disclosed in the original application, which does not contribute to its novelty, utility, or non-obviousness, does not deprive a continuation application of its validity, or a patentee of the original filing date of the parent application"

[Acme Highway Products Corporation v. The D.S. Brown Company et al., (CA 6) 167 USPQ 129 at 134]

"New matter is not introduced by amendments, continuation applications or CIPs which merely clarify or make definite that which was expressly or inherently disclosed in the parent application or which conform the specification to matter originally disclosed in the drawings or claims"

[Stearn v. Superior Distributing Company et al., (CA 6), 215 USPA 1089 at 1094]

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However, the courts have also made it clear that simply because an application purports to be a "continuation" or "CIP" application does not mean that it is a true continuation or true CIP application. Namely, to be a "*true continuation*" application, the application must in fact disclose and claim subject matter previously disclosed in the parent application; e.g.

"Thus, if an application is, in fact, a true continuation application, it is entitled to the filing date of the original parent application. If, however, it discloses and claims subject matter not common to or not supported by the parent application, it is not a true continuation application and any claims therein that include new matter are only entitled to the actual filing date of the later-filed application, and not the earlier parent application"

[Reynolds Metals Company v. The Continental Group, Inc., (DC NIII), 210 USPQ 911 at 929]

The more one compares applicants' 1987 subject matter, i.e. that is disclosed and claimed with respect to the instant 1987 CIP specification, with applicants' 1981 subject matter that was described in the now discarded 1981 parent specification, the more one becomes aware of the differences and inconsistencies that exist between these two disclosures [e.g. note appendix II of this Office action]. These differences and inconsistencies occur at all levels of the CIP disclosure and go far beyond those which merely clarify or make definite the 1981 subject matter previously described in the now discarded 1981 parent specification. In fact, the 1987 systems/methods described in the 557 pages of the 1987 CIP specification appear to be so completely "*expanded*", "*enhanced*", and "*improved*" relative to those of the discarded 1981 parent specification that it not only seems reasonable to question whether or not the instant 1987 is a "*true continuation*" of the 1981 parent, but it seem necessary to question it. Proving their allegations of priority under section 120 to an earlier 1981 filing date is, after all, applicants' burden.

"A party who, like Hiraga, relies on an earlier-filed application under 35 U.S.C. 119 or 120 has the burden to show that the foreign or patent application supports later-added claims under 35 U.S.C. 112-1"

[Utter v. Hiraga 6 USPQ 2d 1709, 1713 (Fed. Cir. 1988)]

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This burden is not met by citing diverse 1981 and 1987 disclosures from the respective 1981 and 1987 CIP specifications that arguably "anticipate" all of a given claim's limitations in respectively different 1981 and 1987 ways (as applicant has alleged throughout the record). To the contrary, a proper Section 120 inquiry demands that the respective 1987 and 1981 teaching be relied upon to establish section 120 priority be compared to determine if they truly represent "common subject matter" required for priority under section 120.

"The inquiry required by section 120 demands a comparison not only of the claims of the parent and continuation-in-part application, but also of any other disclosures made in the applications" [Acme Highway Products Corporation v. The D.S. Brown Company et al., (CA 6), 167 USPQ 129 at 133]

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B. Why the issue of priority under section 120 has been so difficult to resolve:

1) The specification of the instant application comprises the same 557 pages that were in applicants' 1987 CIP application. Thus, to obtain the 1987 effective filing date for that which is currently claimed, applicant needs only show that which is claimed finds adequate Section 112-1 support in the instant 1987 CIP specification. This, however, has proven to be no easy task given the current state of affairs. The problem here is that the pending claims and those portions of the 557 pages of the instant CIP disclosure being relied upon for support of the claims are often so convoluted, that identifying the specific portions of the 557 pages of the instant specification that provide an "adequate written description" of that which is claimed becomes a daunting task for the examiner(s) to perform. Thus, the PTO and the examiner(s) have long sought the help of applicants in identifying those specific portions of the 557 pages that are being relied upon to provide the required written description for that which is claimed in each of the pending amended claims. However, help from applicants has been slow in coming. For example: applicants have argued that it is the examiners' duty, not of applicants', to locate required section 112 support for the claims in the 557 pages of the instant specification and therefor applicants' declined to provide such assistance *voluntarily*⁶; often applicants have chosen to amend the claims rather than explain exactly where that which is currently being claimed is described in the specification thereby effectively avoiding the issue by rendering the examiner's past "encouragement" moot⁷; etc,

2) The process of obtaining the 1981 effective filing date for that which is now claimed is far more complex than that needed to obtain the 1987 effective date. This is because:

a) The description(s) provided by 44 pages of applicants' 1981 parent specification were not carried forward into the 557 pages of the instant 1987 CIP specification in any immediately discernible fashion; and

⁶ Forcing the examiner(s) to encourage such cooperation via extensive section 112 rejections

⁷ Often forcing the examiner(s) to re-write the extensive section 112 rejections to address the limitations of the amended claims.

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b) The 44 pages of applicants' 1981 parent specification were not carried forward into the 557 pages of the instant 1987 CIP specification via any "incorporation-by-reference" statement.

Therefor, in order for applicants to obtain a 1981 date for that which is now claimed, applicants must actually go through the instant 1987 CIP specification. That is:

a) Applicant must first show that the "subject matter" that is now being claimed was adequately described in the 557 pages of the instant 1987 CIP specification in the manner set forth above in part 1 of this section which, as has been noted above, has proven to be no easy task unto itself; and

b) Then, after establishing support in the 1987 specification, applicant must show that this same "subject matter", i.e. that which was described in the 557 pages of the instant 1987 specification as being *the invention*, was also described in the 44 pages of the 1981 parent specification in the same or equivalent fashion.

That is to say that applicant must be able to show that that which is now claimed, i.e. *the invention*, represents subject matter that was "common" to both the 1987 CIP and the 1981 parent specifications.

3) Applicants never attempt to provide "the kind of showing" ⁸ that is required to obtain the 1981 effective filing date of applicants' 44 paged parent specification for that which has been described and claimed with respect to the 557 pages of the current CIP specification. Applicants instead refute the examiner's position concerning what is required for priority under Section 120. Specifically, applicants continue to allege that Section 120 does not require the current claims be directed solely to "common subject matter" that is found (i.e. "adequately described") in both the 1987 and 1981 specifications. Instead applicants continue to argue that the subject matter that is used to support a given claim may in fact be different from specification to specification. Again, applicant seems

⁸ SEE: the immediately preceding part "2)" of current Section "III" of the instant Office action for the "showing" that is actually required.

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to be confusing the issue of "anticipation" under Section 102 with the issue of "adequate written description" under Section 112-1 that has been incorporated into Section 120. [NOTE Section I of this Appendix].

C. It is believed that Applicants' have improperly dismissed, as irrelevant, the significant differences and inconsistencies that clearly exist between the written description that is provided in the 557 pages of the instant 1987 CIP specification and the written description provided in the 44 pages of the past 1981 parent specification (i.e. as they pertain to the issue of priority under section 120):

1) Applicant alleges that the issue of Section 120 priority pertains only to that which is claimed. Namely, applicants contend that:

a) The examiner should first give each of applicants' currently pending amended claims its "broadest reasonable interpretation";

b) Next, the examiner should determine if this "broadest reasonable interpretation" allows the claim to be "supported" (e.g. in sense of "anticipation" under Section 102) by subject matter found somewhere in the 557 pages of the instant 1987 CIP specification;

c) Then, that the examiner should determine if this "broadest reasonable interpretation" also allows this same claim to be "supported" (e.g. in sense of "anticipation" under Section 102) by subject matter found in the past 1981 parent specification; and

d) If the answer to steps "b" and "c" is yes, then applicants contend that the claims are entitled to the 1981 filing date of the parent application irrespective of the many noted difference that exist between the 1987 and 1981 written description that have been relied upon; i.e.

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differences/conflicts that the current examiner has cited throughout the present prosecution.

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim." (emphasis added)

[Page 141 of applicant's response filed on 1/28/2002 in application S.N. 08/470,571]

"Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of 'common subject matter.'"

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

However, as noted above, Applicants appear to have confused the requirement of "anticipation" under section 102 with requirements of "adequate written description" under section 112-1 as incorporated within Section 120.

2) As has been set forth in "Section I" of the Office action mailed 7/17/2002 in SN 08/470,571, the 1987 subject matter that is described in the 557 pages of the instant CIP specification is vastly different from and inconsistent with the 1981 subject matter that was previously described in the 44 pages of applicants' past 1981 parent specification. By applicants' own admissions, the inventions described in the 44 pages of his 1981 specification have been **expanded** by the description that is contained in the 557 pages of the instant 1987 specification so as to contain, at best, "many improvements and enhancements":

"Certainly, I made an effort early on to determine whether or not the disclosures of the '490 patent made their way into the '277 and although they're spread around and sometimes stated a little bit differently, for

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all relevant purposes of this hearing, the '490 patent is expanded by the '277. Its certainly not inconsistent." (emphasis added)
[Applicant counsel argument before the ITC (1997 ITC LEXIS 307, *252)]

"In fact, both [the 1981 and 1987] specifications describe the inventions disclosed in the 1981 specification, although the 1987 specification contains many enhancements and improvements."

[see the last two lines on page 9 of applicant's supplemental response filed 5/6/02 in SN 08/470,571]

Because only expanded descriptions containing "enhanced and improved" 1987 versions of the 1981 inventions exist within the instant 1987 CIP specification, when citing alleged section 112-1 support for the pending claims of the instant 1987 CIP disclosure, applicants' citations inevitably rely on "enhanced and improved" 1987 subject matter⁹. Applicants contend that the fact that the current claims must derive "adequate written description" under Section 112-1 from such expanded 1987 descriptions is irrelevant to the Section 120 priority issue.

"The fact that the [section 112-1] support [that applicant] identified in the 1987 specification for a certain [claimed] features (or limitation) also happens to include additional features or details relating to the same underlying feature (or limitation) disclosed in the 1981 specification, does not mean that both specifications do not support the feature or limitation with similar and valid 'common subject matter' support."¹⁰

[lines 5-8 on page 10 of the supplemental response]

To the contrary, it seems that preventing an applicant from relying on such expanded written descriptions in a later CIP application, one in which claims priority to an earlier filed parent application not having such expanded

⁹ The examiner notes that this fact is blatantly obvious whenever applicant attempts to specifically show alleged dual section 112-1 support for each claim limitation of any given pending amended claim [e.g. as is exemplified via Appendix A of the amendment filed 6/7/2000 in 08/470,571]

¹⁰ Throughout the prosecution history, applicant has maintained that "common subject matter" is not a real/actual requirement of section 120 but is instead a requirement that the examiner himself has created and imposed on the current applicant. It is not clear whether this quote reflects a departure from applicant's past positions (?)

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descriptions is sought, is precisely why the written description requirement of Section 112-1 was incorporated within Section 120 in the first place.

"Unlike the enablement provision of section 112, where the disclosure of a single species might be sufficient to enable a practitioner skilled in the art to make and use any member of the genus,....., the written description requirement of section 112 requires more. See *Vas - Cath, supra*. This strict reading of the written description requirement prevents an inventor from surreptitiously expanding a patent through successive continuation-in-parts. See *id.* At 1562. Essentially, it limits the claims of an applicant to those inventions he clearly discloses, either expressly or inherently" (emphasis added)

[Tronzo v. Biomet Inc. (DC SFla) 41 USPQ2d 1403 ¹¹ citing *Vas-Cath Inc. v. Mahurkar* (CA FC) 19 USPQ2d 1111]

"A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the substance of the invention or makes the composition an invention for the first time, as opposed to the situation in which the subsequent application merely contains either a language change not effecting the meaning of the prior application or a specification which narrows the scope of that which was previously claimed. [*Indiana General Corp. v. Krystinel Corp.*, 161 USPQ 82, 94-95]

After all, the written description requirement of Section 112-1 requires an applicant to provide a written description of *the invention* within his specification, i.e. to describe that which is claimed, in order put the public on notice as to exactly what it is that applicant has invented.

An adequate written description of the invention "guards against the inventor's overreaching by insisting that he recount his invention in such detail that his future claims can be determined to be encompassed within his original creation."

[*Vas-Cath Inc. V. Mahurkar* (CA FC) 19 USPQ2d 1115]

¹¹ NOTE: this case was appealed [*Tronzo v. Biomet* (CA FC) 47 USPQ2d 1829]

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Thus, when considering the adequate written description requirement of Section 112-1 that has been incorporated into Section 120, one actually considers/compares the respective disclosures themselves to determine whether *the invention* as described in the instant CIP specification was also described in the parent specification.

"The inquiry required by section 120 demands a comparison of 1) the claims of the parent and CIP applications and 2) any other disclosures made in the applications such as specification and drawing. *Acme Highway, supra*, at 1079, 167,USPQ at 132-33."

[Stern v. Superior Distributing Company et al., (CA 6), 215 USPQ 1089 at 1094]

"Lockwood argues that the district court erred by looking solely at the applications themselves. We do not agree. It is the disclosures of the applications that count. Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. It extends only to that which is disclosed" (emphasis added)

[Lockwood v. American Airlines Inc. (CA FC) 41 USPQ2d 1961, 1966]

Only if the respective written descriptions from the respective disclosures, i.e. those which are relied upon to describe "the invention", are the same or equivalent is the section 112-1 requirement of section 120 met; e.g. the respective written descriptions must define "common subject matter".

"However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications" (emphasis added)

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 [**18]]

Being such, the differences and inconsistencies that exist between the 1987 and 1981 written descriptions being relied upon by applicant to allegedly support the claims cannot be simply dismissed as being irrelevant to the Section 120 priority issue as applicants wish, hope, and most likely need. That is because these differences define different subject matter and therefor describe different inventions (i.e. by applicants' own admission, that which is described by the 1987

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written description has clearly being "expanded" when compared to that which was described in the 1981 written description).

Clearly, to obtain priority under section 120, the written description of the instant 1987 CIP specification must describe *the invention* that is being claimed, and the written description of the 1981 parent specification must describe *this same invention*. And, contrary to applicants assertions, the only way that this can be determined is by comparing the respective 1987 and 1981 descriptions/disclosures themselves (e.g. for the presence of common subject matter).

"The inquiry required by section 120 demands a comparison of 1) the claims of the parent and CIP applications and 2) any other disclosures made in the applications such as specification and drawing. *Acme Highway, supra, at 1079, 167, USPQ at 132-33.*"

[Stern v. Superior Distributing Company et al., (CA 6), 215 USPQ 1089 at 1094]

3) As noted above, due to the complexity of the Section 120 priority issue that has been created by the way in which applicants have elected to draft their 1987 CIP specification and pending claims, the burden of establishing priority under Section 120 is a daunting task. It is fortunate for the examiner/Office that the burden of showing and establishing section 120 priority falls on applicants:

"A party who, like Hiraga, relies on an earlier-filed application under 35 U.S.C. 119 or 120 has the burden to show that the foreign or patent application supports later-added claims under 35 U.S.C. 112-1"

[Utter v. Hiraga 6 USPQ 2d 1709, 1713 (Fed. Cir. 1988)]

In light of all the ambiguities that have been shown to exist between applicants' 1987 and 1981 written descriptions, applicants' allegations of priority to the 1981 filing date for that which is claimed, when made, will not be accepted until such time that applicant shows that the claim(s) in question fulfill the actual requirement of Section 120; the examiner has not (and will not) accept the "anticipation" standard of alleged claim support which applicants have (and continue) to rely upon improperly [SEE section II of this Office action].

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4) Before the ITC, applicants' own counsel seems to have alleged that he was "unaware of any significant differences" between the specification of applicant 1987 CIP application and the specification of applicant' 1981 parent application.

"To the extent -- and I'm unaware of any significant differences between the '490 patent [the 44 pages of applicant's past 1981 Parent specification] and the '277 patent [the 557 pages of applicant's instant 1987 CIP specification]. I haven't seen one, and I don't remember it. Certainly, I made an effort early on to determine whether or not the disclosures of the '490 patent made their way into the '277 and although they're spread around and sometimes stated a little bit differently, for all relevant purposes of this hearing, the '490 patent is expanded by the '277. Its certainly not inconsistent."

[Applicant counsel argument before the ITC (1997 ITC LEXIS 307, *252)]

Administrative Law Judge Luckern responded to this allegation by pointing out that there was at least one very "significant difference" between applicant's 1987 and 1981 specifications -- namely, the fact that the 557 page of applicants instant 1987 CIP specification was more than 500 pages longer than the 44 pages of applicants' 1981 parent specification.

"There is at least one significant difference in the specifications of the '490 [the 44 pages of the past 1981 Parent specification] and '277 [the 557 pages of the present 1987 CIP specification] patents, viz. the fact that the '277 specification is more than ten times the length of the '490 specification. More over, assuming no inconsistencies between the two specifications, it is indisputable that the '277 specification contains a significant amount of material that was added to the disclosure of the '490 specification in 1987 (i.e. over 500 pages of text)."

[Administrative Law Judge Luckern's response to the applicant counsel testimony (1997 ITC LEXIS 307, *252)]

However, the number of pages added by the 1987 CIP goes far beyond the 500 pages cited by Judge Luckern in light that the 500 page calculation assumes that the 44 page text from the 1981 specification had in fact been carried forward into

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the specification of the 1987 CIP. Such an assumption is clearly erroneous as is evident by applicants' counsels' allegation:

"Certainly, I made an effort early on to determine whether or not the disclosures of the '490 patent made their way into the '277 and although they're spread around and sometimes stated a little bit differently, for all relevant purposes of this hearing, the '490 patent is expanded by the '277. Its certainly not inconsistent."

[Applicant counsel argument before the ITC (1997 ITC LEXIS 307, *252)]

Within this statement, it is unclear as to exactly what applicants' counsel meant by "inconsistent". Namely, it seems to be an undisputable fact that the 1987 systems and methods which are described in the 1987 CIP are "inconsistent" with respect to the systems and methods that were previously described in the 1981 specification to the extent that the 1987 systems/methods clearly represent "expanded", "enhanced", and "improved" versions of the system/method that were described in the 1981 parent.

"Certainly, I made an effort early on to determine whether or not the disclosures of the '490 patent made their way into the '277 and although they're spread around and sometimes stated a little bit differently, for all relevant purposes of this hearing, the '490 patent is expanded by the '277. Its certainly not inconsistent." (emphasis added)

[Applicant counsel argument before the ITC (1997 ITC LEXIS 307, *252)]

"In fact, both [the 1981 and 1987] specifications describe the inventions disclosed in the 1981 specification, although the 1987 specification contains many enhancements and improvements." (emphasis added)

[see the last two lines on page 9 of applicant's supplemental response filed 5/6/02 in SN 08/470,571]

However, preventing "expansion"/"enhancements"/"improvements" of disclosed/claimed subject matter via the filing of one or more such CIP applications is precisely why the written description requirement of section 112-1 was into section 120 in the first place.

"Unlike the enablement provision of section 112, where the disclosure of a single species might be sufficient to enable a practitioner skilled in the art to make and use any member of the genus,....., the written

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description requirement of section 112 requires more. See *Vas - Cath, supra*. This strict reading of the written description requirement prevents an inventor from surreptitiously expanding a patent through successive continuation-in-parts. See *id.* At 1562. Essentially, it limits the claims of an applicant to those inventions he clearly discloses, either expressly or inherently” (emphasis added)

[Tronzo v. Biomet Inc. (DC SFla) 41 USPQ2d 1403 ¹² citing *Vas-Cath Inc. v. Mahurkar* (CA FC) 19 USPQ2d 1111]

“A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are ‘new matter’ which either alters the substance of the invention or makes the composition an invention for the first time, as opposed to the situation in which the subsequent application merely contains either a language change not effecting the meaning of the prior application or a specification which narrows the scope of that which was previously claimed. [*Indiana General Corp. v. Krystinel Corp.*, 161 USPQ 82, 94-95]

“Section 120 merely provides mechanism whereby application becomes entitled to benefit of filing date of earlier application disclosing same subject matter; common subject matter must be disclosed in both applications, either specifically or by express incorporation by reference of prior disclosed subject matter; nothing in Section 120 itself operates to carry forward earlier application; it contains no magical disclosure – augmenting powers able to pierce new matter barriers; therefor, it cannot “limit” absolute and express prohibitions against new matter contained in Section 251.”

[*Dart Industries, Inc. v. Banner*, Commissioner of Patents and Trademarks, (CA DC), 207 USPQ 273]

¹² NOTE: this case was appealed [*Tronzo v. Biomet* (CA FC) 47 USPQ2d 1829]

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Specifically, despite applicants counsel's allegation, the 557 pages of new text that is the 1987 CIP disclosure are full of "*inconsistencies*" with respect to the 44 page written description of the 1981 parent application - at least to the extent that the new disclosure that is the 1987 CIP specification significantly alters the substance of the systems/methods that were described in 1981 parent application (i.e. which is, by definition, "new matter"). That is, the "new" descriptions provided by 1987 CIP are in no way limited to changes in language that do not effect the meaning of that which was described the prior 1981 parent! Namely, when referenced back to the written description of the 1981 parent, the written description of the 1987 CIP effected nothing less than:

- 1) "Expanding" (i.e. changes and broadened) the way in which various terminologies were define and used (e.g. "programming", "words", etc, ...);
- 2) Changes in the way the "illustrated" structures were configured and operated;
- 3) Changed/Upgraded in the signaling transport technology on which all of the described methods/systems of the 1987 CIP disclosure were based (1987 SPAM packets v. 1981 trigger/cuing "words");
- 4) "Expanded" (i.e. changes and broadened) the types of signaling that was conveyed as "instruct" and "control" signals (e.g. provided by the added ability of the 1987 SPAM packets to carry/download computer software);
- 5) "Expanded" (i.e. changed and broadened) the described environments to which the described methods/systems were applied (e.g. the 1987 descriptions no longer being confined to TV/Radio distribution applications);
- 6) Etc,....

Some of the more noteworthy of these differences and "inconsistencies" are addressed in Appendix II of this Office action.

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.....

APPENDIX II [1987 and 1981 disclosures]

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**NOTEWORTHY DIFFERENCES AND INCONSISTENCIES BETWEEN
APPLICANT 1981 AND 1987 CIP SPECIFICATIONS:**

1) On page 149 of the response filed 1/28/2002 in SN 08/470,571, applicants appear to have acknowledged the fact that the same "programming" terminology was defined differently within the respective 1981 and the 1987 disclosures. Specifically:

a) The disclosure of the 1981 parent application, which was not carried forward into the instant 1987 CIP disclosure, defined the "programming" terminology to mean:

"Everything that is transmitted over television or radio intended for communication of entertainment or to instruct or inform"; whereas

b) The instant 1987 CIP disclosure defined this same "programming" term to mean:

"Everything that is transmitted electronically to entertain, instruct, or inform including television, radio, broadcast print, computer programming, as well as combined medium programming".

Amazingly, in this response, applicants allege that the meaning that is respectively imparted to the same "Programming" terminology by these different definitions is the same. In fact, applicant alleges that the only difference that exists between the 1981 and 1987 "programming" definitions are ones that the instant examiner created [see page 149 of the response filed 1/28/2002 in SN 08/470,571]. Nonsense!

Clearly, the 1981 definition defines the "programming" terminology as being Radio and TV transmissions, while the 1987 disclosure *expands* the definition be

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"everything that is transmitted electronically." ¹³ And, contrary to applicants' accusation, the instant examiner was not present and played no part in creating or incorporating these vastly different 1981 and 1987 "programming" definitions into applicants' respective 1981 and 1987 disclosures.

While applicants can avoid using the "programming" terminology itself in the currently pending amended claims, the "expanded" 1987 definition of the "programming" terminology nonetheless continues to impart its *expanded* meaning onto all of the 1987 disclosures in the CIP specification that are based on this expanded 1987 "programming" definition. And thus, in a like manner, these expanded 1987 descriptions continue to associate expanded 1987 scope/meaning with the limitations of the currently pending amended claims which necessarily derive required section 112 support from such 1987 CIP disclosures. And being that the "programming" terminology does not constitute "common subject matter" between 1981 and 1987 disclosures, as is evident from its vastly different 1987 and 1981 definitions themselves, this too refutes applicants current claim to the 1981 date.

As is evidenced above, the instant 1987 disclosure explicitly defines and uses the "programming" terminology in a way that is vastly different both in scope and meaning from the way that this the same "programming" terminology was previously defined and used within the disclosure of the 1981 parent

This evidences the fact that one cannot assume that the terminology shared by the respective 1981 and 1987 disclosure is indicative of "common subject matter."

¹³ In fact, the 1987 definition not only expands the "programming" terminology to mean "everything transmitted electronically", but this 1987 expanded "programming" definition explicitly adds "computer programming", "broadcast print", and "combined medium programming" to the "television and radio transmissions" which made up the 1981 "programming" definition.

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2) The "instruct signals" of applicants' 1987 specification comprised computer software/programming whereas the "instruct signals" of applicants 1981 specification did not comprise computer software/programming:

This too evidences the fact that one cannot assume that the terminology shared by the respective 1981 and 1987 disclosure is indicative of "common subject matter."

3) While the "inconsistent" use/scope/meaning of the "programming" and "instruct signal" terminology between 1987 and 1981 applications is self-evident, the inconsistent use of other shared terminology is less conspicuous. The term "signal word" represents but just one example of the more subtle inconsistencies that exist between the 1981 and the 1987 disclosures.

The 1981 inventions of the 1981 specification were described as having distributed discrete digital information, in the form of "signal units", from a transmitter site to a plurality of receiver as ancillary data embedded within TV and Radio transmissions. To transmit these "signal units", the bits from one or more of the "signal units" were organized into one or more discrete strings of bits. Each of these discrete bit strings was then embedded, at a respective discrete time and/or location, within the transmitted TV or radio programming as a "signal word". Specifically, as defined and used within the 1981 specification, each "signal word" represented a respective occurrence/"appearance" of ancillary signaling within the distributed programming:

"The term 'signal word' hereinafter means one full discrete appearance of a signal as embedded at one of time in one location on a transmission. Examples of signal words are a string of one or more digital data bits encoded together on a single line of video or sequentially in audio. Such strings may or may not have predetermined data bits to identify the beginnings and ends of words. Signal words may contain parts of signal units, whole signal units, or groups of partial and whole signal units or combinations" ¹⁴ [note lines 3-12 of column 3 in US Patent #4,694,490]

¹⁴ "The term 'signal units' hereinafter means one complete signal instruction or information message unit. Examples of signal units are a unique code identifying a programming unit, or a unique purchase order number identifying the prior use of a programming unit, or a general instruction identifying whether a programming unit is to

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Although this 1981 definition of the "signal word" terminology was literally carried forward into the instant 1987, it was carried forward only in a "cosmetic" sense. For while the 1987 disclosure includes an allegation stating that the "signal word" terminology will be defined and used throughout the 1987 disclosure in the same way that it was defined and used in 1981 parent disclosure [see the last 10 lines on page 14 of the instant disclosure], as actually practiced in the 1987 specification, this allegation is wholly untrue. To the contrary, in much to most (if not all) of the remaining portions of the instant 1987 CIP specification, the term "signal word" is not used for the so stated/coined purpose. Instead, the "signal word" terminology was used in a way that is at best inconsistent with its explicitly coined definition and at worst "*repugnant*" to its explicitly coined definition. Specifically, in the remaining portions of the 1987 disclosure, the term "signal word" was now used to refer to the N-bit bytes of "computer-type" data which made up the digital information that is now distributed and/or processed by the 1987 inventions [e.g. note: the last three lines on page 54 of the instant disclosure; lines 4-8 on page 56 of the instant disclosure; lines 9-13 on page 59 of the instant disclosure; etc, ...].

Namely, in the 1981 specification applicants executed their right to be their own lexicographer and gave the "signal word" terminology a meaning that was unique to applicants' 1981 disclosure. Initially, applicants' 1987 CIP specification indicates that this unique 1981 definition of "signal word" has been carried forward into the 1987 CIP specification. In practice, however, the use and meaning of the "signal word" terminology in the 1987 CIP specification was updated so to now refer, in a more conventional sense, to n-bit bytes/"words" of computer data. Thus, somewhat surreptitiously, the meaning/use of the "signal word" terminology has clearly been changed via the filing of applicants' 1987 CIP specification; i.e. the term "signal word" does not constitute common subject matter.

In summary, "signal word" was explicitly defined/coined early in the 1987 disclosure for the expressed purpose of referring to each occurrence/appearance of ancillary signaling within the distributed TV/Radio/Other programming (i.e. corresponding to its definition in the 981 specification of the parent). However,

be retransmitted immediately or recorded for delayed transmission." [note: lines 64-68 of column 2 and lines 1-3 of column 3 in US Patent #4,694,490; and lines 25-32 of the instant disclosure]

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via an apparent sleight of hand, the alleged meaning of the "signal word" terminology was quickly changed within the instant 1987 disclosure so as to refer to the "words"/bytes of digital computer-type data which comprise (and did not carry) said ancillary signaling; i.e. which is quite different from its use in the 1981 parent use/definition.

As with the "programming" terminology, the 1987 CIP disclosure's smeared use/misuse of the explicitly coined "signal word" terminology does not represent "common subject matter" with respect to the disclosure of the 1981 parent and therefor this smeared use/misuse of this terminology is not entitled to the 1981 filing date for reasons addressed above. The smeared use/misuse of the "signal word" terminology:

This evidences the fact that even terminology that has been explicitly coined in both application for the same alleged purpose, is not always what it appears.

[ALSO, SEE "APPENDIX C" ATTACHED TO THE OFFICE MAILED 7/17/2002 IN 08/470,571]

D) As if the existing uncertainties as where section 112 support can be allegedly found were was not enough, it now seems that applicant has come to a realization that some/much/most of the features now being claimed with respect to the instant 1987 CIP disclosure were not "explicitly" disclosed in the past 1981 Parent specification. Because of this, applicant alleges that those features that were not explicitly present in the 1981 parent specification were, allegedly, "inherently" present and/or "implicitly" present within the teachings of the past 1981 parent specification.

"To the contrary, the 1981 definition [of "programming"] implicitly includes, and the 1987 definition [of "programming"] explicitly includes, computer programming in the definition".

[lines 20-26 on page 17 of the supplemental response filed 5/6/2002 in 08/470,571]

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"An applicant is entitled to priority for a claim that was inherently described in an earlier application and explicitly described in a later application"

[note the last 15 lines on page 140 of the response filed on 1/28/2002 in application SN 08/470,571].

With respect to such allegations, the following is noted:

a) As is pertains to section 120 priority, it is applicant's burden to establish priority and thus to explain where and how any such subject matter is implicit in the teaching of the 1981 parent's disclosure; and

b) The implication of claimed subject matter being "inherently" embedded within teachings of the 1981 disclosure, e.g. and previously patented claims derived therefrom, is profound (e.g. especially as it pertains to the issue of double patenting). Thus, it is respectfully requested that applicant now identify:

1. All of those features from the 1987 disclosure that are "inherently" contained within teachings of the 1981 parent disclosure; and

2. All of those teachings from the 1981 disclosure which "inherently" contain features that are now explicitly disclosed in the instant 1987 CIP specification

[especially when the issue of "inherent" features pertains to subject matter that is currently being claimed within the instant pending amended claims or to subject matter which has been claimed within previously patented claims].

c) Applicant cannot simply allege claimed subject matter is inherent in their 1981 parent specification, they must prove it to be inherent:

"If applicant's wish to rely on what inherently happens in examples taken from parent applications, as support for claimed subject matter which is clearly not specifically disclosed, they must prove their case; what they wrote into instant continuation in part application by way of interpretation and contention can avail them nothing."

[In re Ziegler, Breil, Holzkamp & Martin (CCPA) 156 USPQ 511]

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5) In order to transmit a wider range of control and messaging information than was previously possible, and in order to transmit this wider range of control and messaging information more efficiently within "signal word"-like intervals of Radio/TV/"ALL OTHER" forms of electronic transmissions, applicants' instant 1987 CIP disclosure introduced a packetized data structure called "SPAM" (see figures 2E-2K of the instant disclosure). In applicants' 1987 "SPAM" environment, it was this "SPAM" packeting which carried an expanded range of "signal unit"-like information, and it was the "SPAM" packets themselves whose bits were organized into sequences so as to be transmitted within "signal word"-like intervals of TV/Radio/"ALL OTHER" forms of electronic transmission; e.g. the expression "-like" being appended here and above in order to emphasize the fact that the information carried within "SPAM" packeting, and the "strings" of bits derived from such "SPAM" packeting, are different from the 1981 "signal units" and 1981 "signal words" that were explicitly defined by the 1981 even though such terminology was carried forward, i.e. "cosmetically", into the 1987 disclosure [see part "2)" of part "S)" of this section]. The fact that this 1987 "SPAM" transport scheme was not disclosed within applicants' 1981 parent application appears to have been argued by applicants themselves during ITC Investigation No. 337-TA-392:

"Even more difficult to understand is PMC's assertion that the French chef example [in the '490 patent], and I am quoting from their brief, 'it says nothing about the recipe being sent in any type of SPAM signal'Technically, they're correct, because the term 'SPAM signal' was introduced in the '277 patent or the specification which led to the '277 patent [i.e. the instant 1987 CIP disclosure], and it doesn't appear in the '490 patent [i.e. the 1981 disclosure of the past parent] "
[1997 ITC Lexis 307,*254 (Part II)]

As it applies to the issue of section 120 priority, the examiner maintains that the applicant [PMC] was more than just "technically correct". Specifically, while both of applicants' 1981 and 1987 inventions operated to transmit digitally encoded ancillary signaling within TV/RADIO programming, only the 1987 inventions did so using the more sophisticated 1987 packetized "SPAM" transport technology that was first introduced via the instant disclosure as originally filed within the 1987 CIP. And because applicant submits that all of the recited auxiliary "signaling" of the currently pending claims derive their required Section 112-1 support from the more advanced 1987 "SPAM" technology of the instant 1987

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CIP specification, applicant refutes his own claim to the 1981 date of the parent application for these claims being that the 1987 "SPAM" technology now being claimed was not disclosed or supported by the past 1981 parent specification. [NOTE: "APPENDIX A" of applicants' response filed 6/7/2000 in SN 08/470,571; and "APPENDIX C" of the Office action mailed 7/17/2002 in SN 08/470,571].

Because all of the currently pending amended claims appear to have at least one limitation whose meaning is defined by 1987 "SPAM" signaling (a fact that has been evident in all of the claim charts that applicant has submitted to date for the purpose of demonstrating 112-1 support), and because the "SPAM" signaling exists only in the instant 1987 disclosure, all of the currently pending amended claims seem (at best) only to be entitled to the 1987 filing date of the originally filed CIP application; e.g. none of the claims appear to be entitled to the 1981 priority date of the parent disclosure which did not describe "SPAM".

6) Applicant alleges that many/most/all of his pending claims derive required section 112 support from the "WALL STREET WEEK" embodiment that was described in the instant disclosure (wherein said instant disclosure was originally filed within a CIP application on 9/11/1987). During the present prosecution, applicant has alleged that these same pending claims are entitled to priority under Section 120 based on a similar "WALL STREET WEEK" embodiment that was described in the disclosure of the parent application filed 11/3/81. Since applicants' 1987 disclosure is different from applicants' 1981 disclosure, and since applicants' 1987 disclosure did not formally incorporate the 1981 disclosure into the 1987 disclosure physically or via an "incorporation by reference", the pending claims are only entitled to 1981 priority for the subject matter that was common to both disclosures. While the "WALL STREET WEEK" embodiment that is described in applicants' 1987 disclosure and the "WALL STREET WEEK" embodiment that is described in applicants' 1981 disclosure have their similarities, the actual methods/details/structures used to carry out these two "WALL STREET WEEK" embodiments are quite different. The following is provided to exemplify such differences:

a) It is noted that:

1) Applicants' 1987 disclosure references figure 1 of the 1987 disclosure as illustrating the receiver structure that was used to implement the 1987 "WALL STREET WEEK" embodiment [note the

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discussion which begins in line 21 on page 20 of applicant's 1987 disclosure]; and

2) Applicants' 1981 disclosure references figure 6c of the 1981 disclosure as illustrating the receiver structure that was used to implement the 1981 "WALL STREET WEEK" embodiment [note the discussion which begins on line 31 of column 19 of US Patent #4,694,490].

While these two figures use a common label "MICROCOMPUTER" and reference numeral "205" to identify one element of the respective structures, the respectively identified elements are clearly different in both structure and operation:

showing that, as with applicants' use of common terminology, it would also be erroneous for one to assume that common labels and common reference numerals were used in applicants' 1981 and 1987 disclosures as an indication of common elements or "common subject matter".

The fact that commonly labeled elements in applicants 1981 and 1987 disclosures represent different structures/operations/scopes is evidenced in the following:

1) The "MICROCOMPUTER" (205) of applicants' 1987 disclosure actually comprised the circuitry required for overlaying locally generated graphics over the related/received TV signal broadcast. Whereas, in contrast, the "MICROCOMPUTER" (205) of applicants' 1981 disclosure did not comprise such circuitry but instead outputted locally generated graphics to the TV receiver so that they could be overlaid over a related/received TV signal broadcast;

2) the "MICROCOMPUTER" (205) of applicants' 1987 disclosure actually comprised the circuitry required for receiving, loading, and running **downloaded** computer software (i.e. the disclosed "program instruction set") which was used to control the "MICROCOMPUTER"(205) of applicant's 1987 disclosure to execute functions defined by ones of later received discrete

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instructions. Whereas, in contrast, the "MICROCOMPUTER" (205) of applicants' 1981 disclosure was **pre-programmed** with computer software which was used to control the "MICROCOMPUTER"(205) of applicant 1981 disclosure to execute functions defined by ones of received discrete instructions;

b) In view of the differences in structure that is set forth in part a) of this paragraph, it is clear that the method used to overlay graphic images on a related/received TV signal broadcast in the 1987 "WALL STREET WEEK" embodiment is quite different from the method used to overlay graphic images on a related/received TV signal broadcast in the 1981 "WALL STREET WEEK" embodiment. Most notably, in the 1981 "WALL STREET WEEK" embodiment the overlay method was performed by cuing a microcomputer with instructions signals (e.g. with some unspecified type of cuing signals) which caused the microcomputer to execute ones of locally stored software instructions which were required to generate, output, and overlay locally generated graphics onto a received/related video signal broadcast whereas, in sharp contrast, in the 1987 "WALL STREET WEEK" embodiment the overlay method was performed by first **downloading software** to the microcomputer and then cuing the microcomputer with instructions signals (e.g. cuing signals) which caused the microcomputer to execute the downloaded software to generate, output, and overlay locally generated graphics onto a received/related video signal broadcast.

c) The examiner agrees that applicant is entitled to the 1981 priority date only for those claims of the present application which are limited to subject matter that was **common** to both of applicant's 1981 and 1987 disclosures; i.e. that is limited to the subject matter that was previously disclosed in the 1981 parent. Under the present circumstances ¹⁵, it is maintained that applicant is not entitled to the 1981 priority date for claims in which the **same/common support** can not be shown to exist in both of applicant's 1981 and 1987 disclosures. More specifically,

¹⁵ The present disclosure: 1) comprises the 1987 disclosure and is, at best, a CIP of the disclosure filed in 1981; and 2) comprises the 1987 disclosure into which the 1981 disclosure has not been incorporated (i.e. neither literally nor by reference).

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the examiner rejects any allegation that the currently pending amended claims are entitled to the priority of their 1981 disclosure for claims which depend from their 1987 disclosure when it can be shown/alleged that each claim has different interpretations which allow them to be read on applicants' 1987 "WALL STREET WEEK" embodiment (via a first interpretation) and on applicants' 1981 "WALL STREET WEEK" embodiment (via a second interpretation that is different from the first); i.e. priority to the 1981 disclosure should/will only be given if applicant can show that the way that the claims are being interpreted is the same for both disclosures (i.e. if the teachings on which each claim is based is

common to both disclosures). To permit otherwise, would improperly create a tool by which an applicant could obtain the earlier filing date of a first filed invention, for a later filed invention, by carefully drafting subsequently filed claims in a manner which allows said drafted claims to be read on both inventions via different interpretations of the same claims. In the present application, it would be improper for the examiner to give a 1981 priority date to claims that are directed to applicants' 1987 "WALL STREET WEEK" embodiment even if it can be shown that the same claims can be interpreted in a manner which allows them to be read on applicant's 1981 "WALL STREET WEEK" embodiment; i.e. unless it can show that the support that is provided for the claims by both disclosures is in fact the same/common to both disclosures. Because the disclosed structures and processes used to implement applicants' 1987 "WALL STREET WEEK" embodiment clearly differ from the disclosed structures and processes used to implement applicants' 1981 "WALL STREET WEEK" embodiment (note: parts a and B of this paragraph), the examiner maintains that the subject matter which is actually common to both disclosures, e.g. that subject matter of the 1987 disclosure which is actually entitled to priority of the 1981 disclosure, if any, is very small indeed.

7) As is evident from the claim charts filed in SN 08/470,571 on 6/7/2000, all of the recitations that are directed to the signals/instructions/data that are conveyed as ancillary signaling within Radio and TV Programming transmissions, derive their required Section 112 support from the "SPAM" signaling that was first introduced by applicants' "1987" instant disclosure (as they must given that all of the 1987 invention were described with respect to SPAM signaling). Therefor, the scope and meaning that must be given to these signals/instructions/data

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recitations under section 112, e.g. their broadest reasonable interpretations, is necessarily defined/interpreted based said on said "SPAM" signaling. However, "SPAM" signaling was not disclosed in the 1981 parent and, therefor, applicant's claim to the earlier 1981 filing date is again refuted; i.e. the scope/meaning imparted to the currently pending amended claims by "SPAM" of the instant "1987" disclosure would not have been imparted to these same limitations by the earlier filed 1981 disclosure which lacked any discussion of "SPAM" therein; e.g. evidencing the fact that a "different invention"/"New Matter"/"different subject matter" has now been disclosed and claimed within the instant application.

8) The examiner notes that the basic requirement of section 120 includes "continuity of disclosure". Specifically, for priority to an earlier filing date to be established, section 120 requires that the invention now sought to be patented in a child application to have been "disclosed in the manner provided by the first paragraph of section 112" within the disclosure of the parent application. Significantly, section 120 does not indicate that only the descriptive requirement of section 112-1 must be met, but instead it indicates that all of the requirements of section 112-1 must be met [e.g. this includes the "enablement" requirement and the "best mode" requirement too].

TRANSCO [38 F.3d 551; 32 U.S.P.Q.2D (BNA) 1077] was cited in the last Office action. The TRANSCO decision determined that one is not required to update his "best mode" when filing a continuation. Thus, it is true that the current applicant was not required to update his "best mode". However, in *dicta*, Judge Rich warned that requiring an applicant to update the best mode when filing the continuation application defeats the purpose of the "continuation":

"It must be understood that the introduction of a new best mode disclosure would constitute the injection of 'new matter' into the application and automatically deprive the applicant of the benefit of the earlier filing date of the parent or original application for any claim whose validity rests on the new best mode disclosure".

Being such, to the extent that applicants may have updated their "best mode" via the filing of the 1987 CIP application (if at all), e.g. such as the introduction of the

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new SPAM signaling scheme, then it would appear that applicants have deprived themselves of the 1981 priority date given the dicta of TRANSCO.
[see part "23)" of this section V of this Office action]

9) The receiver station circuitry of applicants' 1981 inventions, e.g. that disclosed in the 44 page disclosure of the 1981 parent application, all appear to have been:

- a) "pre-programmed" with the computer programming (i.e. software) that was necessary to detect and recognize the occurrence of certain predetermined digital codes in data that was embedded within received TV and Radio program transmissions; and
- b) "pre-programmed" with the computer programming (i.e. software) that instructed the receiver station circuitry as how to respond when a given one of these certain digital codes was in fact detected/recognized.

Specifically, in the 1981 disclosure, the receiver side circuitry was pre-programmed so as to be effectively "triggered"/"cued" by certain detected/recognized ones of the embedded digital codes in order to executed a respective portion of the pre-stored software (i.e. a respective "subroutine") thereby causing the receiver station to operate in a predetermined fashion.

In contrast, the receiver station circuitry of applicants' 1987 inventions, e.g. that disclosed in the 557 page disclosure of the 1987 CIP, had the advantage that the pre-programmed software itself could now be changed/modified (i.e. "re-programmed") via a new and very different type of data, i.e. "SPAM" messages, which were now embedded within the received TV and Radio programming. The ability to re-program the receiver stations from a distance (e.g. remotely) meant that the way in which the receiver stations of the system operated/responded to detected/recognized digital codes (now transmitted within "SPAM messages" too) could be change on the fly (i.e. without a visit from a service technician being necessary).

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Given the above, it is clear that the 1987 inventions do not represent "common subject matter" with respect to the 1981 inventions even though they can both could be operated, in very different ways, to produce/provide a similar effect/"application"; e.g. such as respective 1981 and 1987 "WALL STREET WEEK" applications. However, the vast difference in the nature of the 1987 and 1981 inventions appears to be partially masked by the repugnant use (i.e. misuse) of the "computer program" terminology by the 1987 disclosure to encompass things other than computer "software". For example, in lines 13-20 on page 427 of the instant disclosure, the 1987 "invention" was explicitly described as comprising a computer system which operated to produce combined medium combining at respective subscriber stations via the transmission of one "computer program" (e.g. software) to all the computers at all of the subscribed stations. Yet, as an alleged example such computer system operation (e.g. lines 20-34 on page 427), the 1987 disclosure repugantly cites an operation during which the transmitted SPAM messages were carrying codes which only triggered/cued specific receiver responses within already pre-programmed/re-programmed receiver station circuitry; e.g. as opposed to actually citing an operation during which "software" was being downloaded to re-program the receivers (e.g. as described in lines 5-21 on page 24 of the instant disclosure). By using the "computer program" terminology in this repugnant fashion, the 1987 disclosure attempts to impart some legitimacy to the erroneous claim that the 1981 disclosure described the downloading of "computer software/programming" too; i.e. the argument being that because the trigger/cuing type codes of the 1987 disclosure have been erroneously defined as having comprised "computer programing" (e.g. software), then the corresponding cuing/trigger codes of the 1981 disclosure must be erroneously considered computer programming/software too [a position which also appears to be reflected in applicant arguments (e.g. note example #2 under "Section II" in the Office action mailed on 8/27/01 in SN 08/470,571)]. The result is still further confusion!

10) etc,....

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.....

APPENDIX III

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THE "LIST":

1) In lines 2-8 on page 142 of the amendment filed on 1/28/2002 in application SN 08/470,571, applicant suggests that the examiner has objected to the fact that applicant provided citations showing dual support for the claims with respect to both the 1981 and 1987 disclosures. No such objection was ever been raised by the examiner. To the contrary, the examiner finds applicants' citations of dual 1981 and 1987 support to be one of the most helpful aids that applicant has provided to date when applicant's allege priority to the 1981 filing date (i.e. especially when presented in the form of claim charts).

Having said this, the fact remains that examiner/Office was unquestionably misled by the many statements made by applicant concerning the "consequences" of Section 120 "priority". The reason that these statements misled the examiner/Office seems to be self-evident from the statements themselves. For example, in the last 7 lines on page 24 of the Appeal Brief filed in SN 08/113,329 on 9/17/1996, applicant states:

"The case law makes clear that the only inquiry concerning claims filed in a subsequent continuation application pursuant to Section 120 is whether they are adequately supported in under Section 112, first paragraph, in the initial application. If the support exists, the inquiry is at an end."

And statements made in the remarks section of many of applicant's amendments in which applicant states:

"The present application claims priority under 35 USC §120 of the following applications.....Consequently, Applicants will demonstrate disclosure only with respect to the '81 case,..."

[e.g. see lines 9-21 on page 000507 of the Appendix in the document mailed on 9/10/01 in SN 08/474,139]

These statements misled the examiner/Office into believing that, as a consequence of Section 120, applicant was permitted to use the disclosure of his 1981 parent application alone, e.g. in place of the instant 1987 CIP disclosure, to fulfill section 112 requirements when addressing/replying to Section 112 rejections (i.e. in those situation which the 1981 priority date was alleged).

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However, the examiner/Office now understands that, because applicants' past 1981 parent disclosure was not incorporated into the instant disclosure, the 1981 specification cannot be relied upon by applicant for showings of section 112 support when addressing/responding to rejections made under Section 112; i.e. all section 112 Support must come from the instant "1987" CIP disclosure alone.

The "*objections*" made by the examiner in 08/470,571 were raised because the examiner perceived a continuation, on the part of the applicant, of the same arguments that misled the examiner/Office in the first place. By raising these "*objections*", the examiner hoped to elicit a response from applicant acknowledging the fact that the instant "1987" disclosure was the only disclosure which could be used to fulfill the requirements of section 112 with respect to the limitations of the currently pending amended claims (the significance of the 1981 disclosure is relegated only to the secondary issue of Section 120 priority). The examiner wanted to be sure that the examiner and applicant were now on the same page concerning this issue. And, on at least one occasion, such an acknowledgment appears to have been provided by applicant [see the last 5 lines on page 141 of the amendment filed on 1/28/2002 in SN 08/470,571].

2) Applicant does not believe that "common subject matter" is required for "priority" under Section 120. Instead, according to applicant, the only thing that applicant needs to do in order to obtain the earlier 1981 filing date for his currently pending amended claims, is to show that each of his pending amended claims can be given different 1987 and 1981 claim interpretations which allows each claim to be supported, in parallel, by "different subject matter" from the 1981 and 1987 specifications.

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim."

(emphasis added)

[Page 141 of applicant's response filed on 1/28/2002 in application S.N. 08/470,571]

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"Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of 'common subject matter.'"

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

For the reasons that have been addressed in "Appendix I" of this Office action, applicants' position seems to be in error. Namely, applicants appear to be confusing the requirements of "anticipation" under section 102 with the actual requirements of "adequate written description" under section 112-1 that has literally been incorporated into section 120.

"However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications" (emphasis added)

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

"Any claim in a continuation-in-part application that is directed solely to subject matter adequately disclosed under 35 U.S.C. 112 in the parent application is entitled to the filing date of the parent application."

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

"Assuming the common inventorship, copendency, and cross-reference required by section 120, that section further requires only that the invention be disclosed in the parent application in such manner as to comply with the first paragraph of section 112 and be the same invention as that disclosed in the later application." (emphasis added)

[*Kirschner*, 305 F.2d 897 (C.C.PA1962)]

3) In the last 5 lines on page 141 of the response filed on 1/28/2002 in 08/470,571, applicant acknowledged that the 1981 application was not incorporated into the 1987 application. As a consequence, applicant also appears to understand that all Section 112 support must come solely from the "instant" 1987 disclosure if the requirements of section 112 are to be satisfied. If

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applicant knows such to be true, then it is not understood how or why applicant could still adopt the following position:

"the [examiner's] assumption that 'all limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure' is mistaken and wholly unsupported." ¹⁶

[lines 8-10 on page 144 of the amendment filed in 08/470,571 on 1/28/2002].

Namely, if all section 112-1 support for all of the claims' limitations must necessarily come from the instant "1987" disclosure alone (e.g. in light that the disclosure of the 1981 parent was not formally incorporated into the instant 1987 disclosure), then how can a limitation of a claim be directed to (i.e. and obtain required section 112-1 support from) anything but that which is described within the said instant 1987 disclosure? Is applicant really suggesting that the pending amended claims are **not** necessarily directed to, do **not** necessarily derive section 112-1 support from, and are **not** necessarily claiming, subject matter that is found in the instant 1987 disclosure?

4) Applicant has alleged that "Teletext decoders" did not "locally generate" the images that they outputted/displayed by processing received teletext data. According to applicant, Teletext decoders only transferred, to their outputs, displayable image data that was received at their inputs. The examiner rejects such a notion. The following is noted:

a) That, as was exemplified via the discussion provided on page 5 of the appendix that was attached to a 1981 "PETITION FOR RULEMAKING" submitted to the FCC ¹⁷, it was notoriously well known in the art that transmitted Teletext data *typically* comprised a "series of instructions" which instructed the Teletext decoders as to how to "generate" the desired images which were to be outputted/displayed;

¹⁶ Contrary to applicants' position, the examiner maintains that a pending claim must necessarily be directed to that which is described in the instant specification. This is not to say that the resulting scope of the pending claim is limited only to that which it must necessarily be directed.

¹⁷ SEE: APPENDIX E and APPENDIX F of the Office action mailed 7/17/2002 in SN 470,571.

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b) That conventional Teletext decoders *typically* comprised "character generators"; i.e. such "character generators" would not have been required had the received Teletext data actually comprised displayable image data as alleged by applicant; and

c) That transmitted Teletext data *typically* comprised of ASCII-type codes; i.e. wherein one of ordinary skill in the art would have understood the fact that these ASCII-type codes are not themselves displayable. Specifically, these ASCII-type codes only identified the way in which locally stored pixel patterns which were locally retrieved and locally assembled into a displayable image frames, e.g. via the "character generators", in order to locally generate the images that were outputted/displayed.

Clearly, Teletext decoders operated to "*locally generate*" the images that they outputted and displayed by processing received Teletext data! ¹⁸

5) Applicants' 1987 inventions used a "SPAM" transmission packet structure to transmit ancillary information through the TV broadcast networks. By using the "SPAM" packet structure, a transmission scheme was established in which a piece of coherent "information", e.g. such as a complete "processor instruction", could be broken down into a plurality of "partial information" segments and communicated through the TV network within/as respective "discrete (packet) signals". On the receiver side of the 1987 inventions, the partial information from the plurality of discrete signals could be recovered and re-organized back into the original piece of coherent "information (e.g. re-organized back into the single complete processor instruction).

Applicants have alleged the above described "partial information" transmission scheme is a key feature which distinguishes applicants' alleged 1987 inventions over Teletext "prior art". Applicants' allegation is founded on a huge misunderstanding/misrepresentation of the Teletext "prior art". In fact, via such arguments, it appears that applicant is effectively trying to re-invent the foundation on which the Teletext "prior art" was actually built [e.g. see the arguments which begin at the top of page 354 and extend to the bottom of page 356 in the response filed on 1/28/02 in SN 08/470,571].

¹⁸ SEE appendix "F" of the Office action mailed on 7/17/2002 in SN 08/470,571.

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Specifically, standardized Teletext was based on the recognition that vacant lines occurring during the VBI of TV signal transmissions could be used to transmit/communicate embedded frames/"pages" of character/graphics information along with the TV programming. However, it was immediately recognized that each video line did not have sufficient bandwidth to carry an entire frame/page of the character/graphics data. Therefore, the prior art Teletext systems established Teletext packet structures by which "partial image/information" segments (e.g. such as single "rows" of character and control information) could be communicated via respective discrete packetized signals which were embedded within respective discrete television line intervals. On the receiver side of the Teletext "prior art", the partial information segments from the plurality of discrete packetized signals were recovered and re-organized back into the original frame/pages of character/graphics information in order to "locally generate" a Teletext image for display. But the clear correlation that exists between applicant's "SPAM" transmission scheme and prior art Teletext transmission schemes does not end here!

In addition to the transmission of character/graphic frames/pages, those of ordinary skill in the art quickly recognized that the prior art Teletext transmission schemes could be "extended" so as to carry other kinds of information; e.g. "Telesoftware" (i.e. computer programming), remote control signaling, etc,... This additional information was carried using the same packetized Teletext structure previously established for the character/graphic image data. For example, Telesoftware was also broken down into "partial information" segments to be carried as "rows" of character-like data within respective Teletext packets of one or more Teletext pages (e.g. depending on the size of the Telesoftware program that was being communicated). On the receiver side, the "partial information" segments of the additional information were then recovered from the transmitted discrete packet signals and were re-organized back into its original form (e.g. the complete "Telesoftware" program was reconstructed from the discrete partial programming segments).

Given the above, it is still the examiner's position that applicant's 1987 packetized "SPAM" structure represents little more than applicants' own version of a conventional "extended" Teletext system [SEE part "A." under "Section XI" in the Office action mailed 8/27/01 in SN 08/470,571]. And again, for the reasons addressed above, the examiner continues to refute applicants' position that claim recitations directed to "discrete signals" and "partial information" adds anything to the claims which would avoid/overcome Teletext "prior art" applied under sections 102 or 103; i.e. applicants' allegations to the contrary represent nothing

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but "straw men." [This issue has been addressed in greater detail in section II of the action mailed 7/17/2002 in 08/470,571].

6) Applicants point out that term "computer software/programming" has been defined as: "a series of instructions that controls the operation of a computer". Stretching this definition, applicants erroneously suggest that the term "computer software" encompasses: "any series of instructions that controls the operation of a computer". And finally, using this improperly stretched definition, applicant argues that each series of transmitted cuing-type codes which were described in his 1981 parent application *implicitly* taught the transmission and/or downloading of "computer software" in view that each of these series of codes represented "instructions which controlled the operation of a computer". Applicants' argument is lame for if one were to accept applicants' argument, then:

- a) A computer mouse and computer keyboard suddenly become generators of "computer software" because they too generate series of instructions which are used to control the operation of a computer;
- b) Teletext data itself, when received by a CPU implemented decoder, suddenly becomes "computer software" because it too represents series of instructions which are used to instruct a computer as to how to generate an image for display;
- c) etc,...

Clearly, applicants' argument twists the definition of "computer software" in a way that is repugnant to its conventional use/meaning in order to obtain alleged "support" as of the 1981 filing date for something that was not shown to be in his possession, i.e. was not disclosed, until the filing of his 1987 CIP application; e.g. namely, the downloading of computer software.¹⁹
[SEE parts "15)" and "16)" of this appendix too]

¹⁹ In the supplemental response filed 5/06/2002 in 08/470,571, applicant now submits a different version of essentially the same argument [see part "P)" in "SECTION I" of the latest Office action mailed in 08/470,571].

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7) While applicants have alleged that his 1987 "computer software/programming" recitations should be stretched so as to retroactively find alleged section 112-1 support from things which were not "computer software/programming"²⁰ (i.e. a series of cuing-type codes/signals from the 1981 disclosure), applicants also takes the opposite approach by alleging that circuit structures which operated to process signals (i.e. specifically Teletext decoders) are not encompassed by the "signal processor" recitations of ones of their pending amended claims.²¹ The examiner disagrees noting that such arguments are in conflict with applicant's own written description [e.g. note lines 37-38 in column 205 of applicant's own US Patent #5,335,277]. Specifically, not only are Teletext decoders "signal processors" in any conventional sense of such terminology, but that Teletext decoders are in fact "signal processors" within the context of applicants' own alleged invention. More to the point, the Teletext decoders of the applied prior art are like the "SPAM" decoders of applicants' own alleged inventions in that both decoders operated to extract and process packets of encoded information distributed to them, at least "*preferably*", via the VBI of broadcasted and/or cablecasted TV programming. These packets of encoded information comprised *Teletext data packets* in the case of conventional Teletext decoders and comprised *SPAM data packets* in the case of the SPAM decoders of applicants alleged invention.²²

In conclusion, applicants' allegation that conventional Teletext decoders should somehow be excluded by the "signal processor" recitations of his pending claims falls under the heading of: "NONSENSE."²³

²⁰ This erroneous reading has been used in order to erroneously allege a 1981 "priority" date for current claim recitations which are directed to the 1987 "computer software/programming" features of the instant 1987 CIP specification.

²¹ This erroneous reading has been used to try to distinguish which is now claimed over applied "prior art" of record.

²² In fact, for reasons which will be addressed in more detail below, the examiner maintains that the "SPAM" data packets of applicants' alleged invention represent, for all intents and purposes, little more than applicants' own version of a Teletext system in which the function of its Teletext data packets have been "extended" so as to carry more than just the normal displayable character/graphics code (e.g. "extended" to carry control signals, Telesoftware, etc,...).

²³ NOTE:

1) That typical Teletext decoders sequentially performed steps of signal slicing/separation, serial-to-parallel conversion, signal storage, ASCII code to pixel data translation, etc... all which were recognized as having comprised steps of "signal processing" [the last 16 lines on page

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5 of the appendix that is attached to the "PETITION FOR RULEMAKING" which was filed with the FCC on 3/26/1981 by the "United Kingdom Teletext Industry Group" which explicitly indicates Teletext decoders as having performed "signal processing"}; and
2) that such processing was even true in the unusual "ideograph" decoders of applicants' argument [i.e. see the block labeled "Teletext signal processor" in figure 10 of the NHK article "A Teletext System for Ideographs" by Numaguchi et al.].

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8) The examiner maintains that applicants' own "SPAM" transmission system, at least as described in the context of television distribution, constitutes little more than applicants' own version of an "extended Teletext system".²⁴ However, when Teletext "prior art" has been applied against applicant's claims, applicant has become hostile to the suggestion that there is any correlation between his "SPAM" transmission system and conventional Teletext transmission systems.²⁵ Yet, on the other hand, applicant appears to openly believe that the scope of many of his pending amended claims encompasses the "WEATHER STAR" system/receiver technology which, to the extent understood by the examiner, is in fact a Teletext based technology.²⁶ If applicants' claimed/disclosed "SPAM"

²⁴ The term "extended Teletext" is being used here to refer to Teletext systems that have been "extended" so as to carry other types of information beyond the normal/typical coded Teletext character/graphic information. One alleged novel feature of applicants' SPAM packets was its ability to carry and distribute computer software. However, contrary to applicants' allegation, packets of "extended Teletext" systems had long been used to carry and distribute computer software too. In fact, the term "Telesoftware" had been specifically coined so as to refer to the "software" that was carried by "extended Teletext systems. The point being, that SPAM and Teletext data packets are equivalent right down to there recognized ability to carry other forms of information including "Telesoftware".

²⁵ Yet a large portion, if not the majority, of the "prior art" cited by applicant pertains to Teletext.

²⁶ SEE: the article "Landmark forms cable weather news network" which is already of record.

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systems/receivers encompass Teletext based systems/receivers such as the "WEATHER STAR" system/receiver technology, then how in the world can applicant possibly suggest that "SPAM" and Teletext are not correlated/analogous technologies/arts with respect to the applied prior art? Clearly there is a conflict between the two positions taken by applicant.

9) Applicants and applicants' originally filed 1987 disclosure both seem to have alleged that "digital television signals/programming", of the type that is recited in many of applicants' pending amended claims, was notoriously well known in the art at the time of his alleged invention. The examiner has challenged these allegations and has requested that applicant submit "prior art"/evidence which shows such to be true. In response to the examiners' request, applicants submitted U.S. Patent #3,906,480 to Schwartz et al. as having allegedly evidenced the conventional "digital television signal" technology on which their disclosure and amended claims were/are based [note the last 11 lines on page 97 and lines 3-6 on page 98 of the amendment filed on 6/7/2000 in SN 08/470,571]. The examiner continues to be mystified by this submission. The examiner points out that the cited Schwartz et al. patent describes a computer display system in which a computer was used to generate, albeit digitally, *frames* of vector encoded graphic/character information which were then transferred, via a data bus, to "digital TV monitors" for display thereon. As far as the examiner can tell, the Schwartz et al. disclosure has absolutely nothing to do with the transmission of "digitized TV signals/programming" in any conventional sense of such terminology. Simply trying to figure out how the Schwartz et al. patent might be related to anything that was originally disclosed by applicant in his 1987 disclosure, much less trying to figure out how it could have been used to "enable" that which was originally disclosed by applicant in his 1987 disclosure, represents an insurmountable invitation to experimentation unto itself. If Schwartz et al. was cited out of necessity (e.g. if it actually represents the best showing of his "digital television" recitation that applicant is/was aware of), then its very presence in the record goes to support the examiner's position that which is now claimed by applicant, i.e. via the subsequently introduced "digital television" recitations, was not supported and/or enabled by applicant's originally filed 1987 disclosure (much less the 1981 disclosure to which priority is often sought).

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10) Applicants made many attempts to have the Zaboklicki prior art [DE 2,914,981] removed from consideration. In many responses [e.g. the communication filed 7/13/2000 in 08/470,571], applicant has argued that the applied Zaboklicki reference should be removed from consideration simply because the teachings and descriptions provided by this prior art reference differ from teachings and descriptions provided by another non-applied members of its patent family (namely, GB #2,016,874). Such a position is absurd. If Zaboklicki DE 2,914,981 teaches that which applicant now claims, then the fact that Zaboklicki GB #2,016,874 might not have provided these same teachings (even if proven true) is irrelevant to the fact that the claims ARE unpatentable over Zaboklicki DE 2,914,981. ²⁷

11) Within the originally filed abstract of applicants' 1981 past parent specification (i.e. note S.N. 06/317,510), the term "*programming*" was explicitly defined to mean:

"everything transmitted over television or radio intended for communication of entertainment or to instruct or inform".

[see lines 4-7 in the abstract of US patent #4,694,490]

Today this definition is in conflict with applicants' present needs (e.g. it too refutes applicants' claim to the earlier 1981 priority date ²⁸). Being such,

²⁷, It is important to note that Zaboklicki [DE 2,914,981] included an extensive "List of References" section that described the operation of the Zaboklicki system element-by-element. This section was absent from Zaboklicki [GB 2,016,874]. This additional description in Zaboklicki [DE 2,914,981] is not trivial in that it goes a long way to understanding the invention which was disclosed in the applied Zaboklicki prior art; e.g. namely DE 2,914,981 (not GB 2,016,874).

²⁸ The examiner notes that applicant is only entitled to the 1981 priority date for "common subject matter"; i.e. the "same" subject matter that is commonly found in both the present 1987 and the 1981 parent disclosures as originally filed. However, the term "programming" itself does not represent "common subject matter" required for priority because the definition given to it within the present 1987 disclosure is vastly different than the definition given to it via the 1981 parent. Specifically, whenever the "programming" terminology is used in a currently pending claim, section 112-1 demands that it be held to the definition that is explicitly provided via the present 1987 disclosure. This 1987 definition is not entitled to the 1981 priority

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applicants have argued that this explicitly stated definition should be ignored and given no weight because it appears in the "abstract" of the 1981 disclosure and, applicant alleges, the abstract was not *technically* part of his 1981 written description. The examiner rejects this allegation too. The examiner points out: that the originally filed abstract was most certainly part of the originally filed disclosure of the 1981 parent application on which all issues must be considered/based. More importantly, the examiner notes that the definition of "programming" that was provided by this originally filed abstract is completely consistent with the way that "programming" was actually used throughout the 1981 disclosure; i.e. in the context of the 1981 specification, the term "programming" was clearly used to refer to scheduled TV or Radio shows. [note: parts "15)" and "16)" of this appendix too]

12) Applicant seems willing to acknowledge that the "1987 inventions" that are described in the instant 1987 CIP specification are in at least in some ways "expanded", e.g. *enhanced and improved*, versions of the 1981 inventions that were described in applicants' past 1981 parent specification.

"In fact, both [the 1981 and 1987] specifications describe the inventions disclosed in the 1981 specification, although the 1987 specification contains many enhancements and improvements."

[see the last two lines on page 9 of applicant's supplemental response filed 5/6/02 in SN 08/470,571]

One of the "enhancements and improvements" that was effected via the subsequent filing of instant 1987 CIP specification was a change made to the definition of the word "programming." Whereas the past 1981 Parent specification defined the terminology as referring to Television and Radio transmissions, the instant 1987 specification "improved and enhanced" the 1981 definition of "programming" to explicitly cover "all forms of electronic transmission" now explicitly including "computer programming", "broadcast print", etc,... (e.g. additions to the radio/TV transmission of the past 1981 definition).

date in view that the 1981 disclosure explicitly gave the same terminology a different meaning.

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**"everything that is transmitted over television or radio intended for communication of entertainment or to instruct or inform";
[*"programming" as defined in the past 1981 Parent specification*]**

**"everything that is transmitted electronically to entertain, instruct, or inform including television, radio, broadcast print, computer programming, as well as combined medium programming".
[*"programming" as defined in the instant 1987 CIP specification*]**

Thus, whereas a potential infringer might have reasonably believed that applicants' claims pertain to subject matter within Television and Radio program transmission arts given the 1981 definition of "programming" (e.g. that the claimed invention does not pertain to computer software/programming transmissions), the wiggle room for such a belief/finding has been effectively eliminated when the identically worded claims derive their required section 112-1 support from description that is provided within 1987 CIP specification instead; i.e. being that the 1987 specification replaces the 1981 definition of "programming" with the new "improved and enhanced" 1987 definition of "programming" which has been "expanded" to explicitly covers "all forms of electronic transmission" including, i.e. explicitly, said "computer programming" transmissions.²⁹ Being such, the examiner asks:

²⁹ The examiner maintains that the differences in the respective 1981 and 1987 definitions of "programming":

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Why should any applicant be allowed to improve/enhance/redefine the subject matter that is being recited by a given claim using the new subject matter that was added via a subsequently filed CIP specification, e.g. in order to tighten the noose on existing potential infringers and/or to cast a wider net to ensnare new potential infringers, and yet still be entitled to the earlier filing date of a past un-incorporated 1981 Parent specification that did not contain this improved/enhanced/redefined subject matter?

The short answer to this question is: NOT! As noted in the "priority" section of this Office action, preventing a patent from being expanding in this manner was precisely the reason why the written description requirement of section 112-1 was incorporated into Section 120 in the first place.

"Unlike the enablement provision of section 112, where the disclosure of a single species might be sufficient to enable a practitioner skilled in the art to make and use any member of the genus,....., the written

1) represent real differences in the respective "properties" of the different kinds of "signaling" that made up the respective 1987 and 1981 subject matter; and

2) are not simply different statements of "disclosed utilities" as applicant might try to allege in the future.

(e.g. once again, the 1987 SPAM-type signaling subject matter that is necessarily being claimed by the pending claims is explicitly inclusive of "computer software/programming" whereas the 1981 signaling subject matter was not).

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description requirement of section 112 requires more. See *Vas - Cath, supra*. This strict reading of the written description requirement prevents an inventor from surreptitiously expanding a patent through successive continuation-in-parts. See *id.* At 1562. Essentially, it limits the claims of an applicant to those inventions he clearly discloses, either expressly or inherently" (emphasis added)
[Tronzo v. Biomet Inc. (DC SFla) 41 USPQ2d 1403 ³⁰ citing *Vas-Cath Inc. v. Mahurkar* (CA FC) 19 USPQ2d 1111]

An adequate written description of the invention "guards against the inventor's overreaching by insisting that he recount his invention in such detail that his future claims can be determined to be encompassed within his original creation."
[*Vas-Cath Inc. V. Mahurkar* (CA FC) 19 USPQ2d 1115]

The point being that applicant had every right to draft a claim based on his past 1981 parent specification which contained the 1981 definition of "programming", and to have taken the position that a fair reading of the 1981 "programming" terminology, e.g. in the context of said past 1981 parent specification, encompassed "computer programming" transmission too; i.e. wherein such an "argument" would have been necessary in view that the 1981 definition of "programming" did not include "computer programming". Instead, applicant elected to draft a new CIP specification which modified the definition of "programming" to explicitly include "computer programming" thereby eliminating any question that the fair reading of "programming", in the context of the new 1987 CIP, now encompasses "computer programming". Again:

Why should any applicant be allowed to improve/enhance/redefine the subject matter that is being recited by a given claim using new subject matter that was added via a subsequently filed CIP specification, e.g. in order to tighten the noose on existing potential infringers and/or to cast a wider net to ensnare new potential infringers, and still be entitled to the earlier filing date of a past un-incorporated 1981 Parent specification that did not contain this improved/enhanced/redefined subject matter?

³⁰ NOTE: this case was appealed [Tronzo v. Biomet (CA FC) 47 USPQ2d 1829]

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*(E.G. Why does applicant believe that his new 1987 definition of "programming" should be entitled to the 1981 filing date of the old 1981 "programming" definition which it replaced?; Why should applicant's "1987 inventions", which have been **described** in terms of the new 1987 definition of "programming", be entitled to the 1981 filing date of "past 1981 inventions" which were **described** in terms of the lesser 1981 definition of "programming?"; etc,...)*

13) To try to overcome applied prior art of record, applicant has repeatedly alleged that the Radio and Television broadcast arts constitute non-analogous arts. This position is absurd and wholly unsupportable too.³¹ The examiner points out that the Television broadcast art actually evolved from the radio broadcast art because the original radio broadcast networks represented existing entities who had the program distribution resources and expertise that was easily extended and applied to TV programming; e.g. NBC, CBS, ABC all began as Radio distribution networks which evolved, quite "naturally", into Television broadcast networks too [NOTE: the last 5 lines of the first paragraph of the first column on page 811 of the article "Versatile Transmission Video Facilities at NBC New York" by Mausler which states that: "the origins of television broadcasting practice may be found in radio" (a copy of which was provided within SN 08/470,571)]. In fact, the most significant difference (i.e. if not the only "real" difference) between Radio and Television distribution networks is the difference in bandwidth of the equipment that is required to handle Radio and Television program signal distributions. Thus, for example, when Hetrich [Australian patent #74,619/ U.S. patent #3,866,123] stated that the disclosed "Netcue" system was applicable to either "a network of radio or television stations", one of ordinary skill in the art would have recognized that this teaching

³¹ Note that adequacy of applicants' own disclosures, especially that of the 1981 parent, appear to be based on the fact that one would understand that radio and television systems are in fact analogous (i.e. evident in the 1981 definition of "programming" alone).

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was in fact founded on the underlying understanding that Radio and Television network were analogous arts. Applicant's allegations to the contrary are clearly based on a unrealistically low level of skill in the art.

14) Throughout the prosecution of their vast patent application portfolio, applicants have alleged that the "***simultaneous or sequential presentation***" recitation, as found in many of their pending claims, represents a "key limitation" in overcoming and/or avoiding "prior art" of record [note: lines 2-6 on page 17 of Appendix A in the response filed on 3/19/2001 in SN 08/469,078; and part "4)" under "Section VII" of the Office action mailed 8/27/01 in SN 08/470,571]. The examiner strongly disagrees. The examiner points out that the alternative expressions "*simultaneous or sequential*" or "*one of a simultaneous and sequential*" simply encompasses ANY AND ALL of the ways by which two types of information could ever be presented to a given audience. Specifically, any time two types of information are presented to a given audience, they must necessarily be presented to that audience either *simultaneously or sequentially* in time. The phrase "*simultaneous or sequential*" simply covers ALL of the possibilities! Thus, if one can show that a given piece of "prior art" operated to present two types of information to a given audience, then one has in fact inherently shown that the prior art meets the "*simultaneous or sequential presentation*" limitation of applicants' claims; i.e. again, the recitation "*simultaneous or sequential*" simply covers ALL of the way that two types of data could ever be displayed to a single audience!

15) Applicant has alleged that his past 1981 Parent specification "implicitly" taught the downloading of "computer programming" (i.e. computer *software*).

"To the contrary, the 1981 definition [of "programming"] implicitly includes, and the 1987 definition [of "programming"] explicitly includes, computer programming in the definition".

To try justify/support this erroneous allegation, applicant attempts to weave together a tapestry of "engineered" teachings and definitions:

A) First, applicant falsely asserts that the past 1981 Parent specification literally used the term "programming" to refer to the described "instruction

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signals" that were communicated through the TV/RADIO networks of the disclosed "1981 inventions";

B) Applicant then correctly notes that the "instruction signals" of the past 1981 specification were described as comprising signals which instructed **preprogrammed** microcomputers to perform given tasks.

C) Next, applicant cites an outside *Dictionary* definition of the term "program" to show that the term "programming" was conventionally used to refer to "computer programming/software"; and

D) Finally, applicant erroneously concludes that when one combines the above "engineered" teachings from his past 1981 Parent specification together (A and B above), based on the cited *Dictionary* definition of "program" (C above), one "implicitly" arrives at the cited *Dictionary* definition of "program."

[i.e. applicants improperly uses an outside dictionary definition of "programming" as the means for erroneously interpreting and combining teachings from the 1981 specification in a way which allows the outside dictionary of "programming" to be retroactively created/inserted within the 1981 specification]

However, for a variety of reasons, applicants' tapestry of teaching falls apart at the slightest touch:

1) When one looks at the way in which the 1981 "programming" terminology was coined and used throughout applicants' past 1981 Parent specification, one finds that the 1981 "programming" terminology referred to signaling which represented scheduled TV/Radio shows (i.e. TV and Radio *programs*). One finds that the 1981 "programming" terminology was never used to refer to "computer software" as applicant now wishes. In fact, despite applicants' false assertion (see "A" of this section), one finds that applicants' 1981 specification did not even use the 1981 "programming" terminology to refer to the 1981 "instruct and information signals". Quite the contrary, applicants' 1981 parent-specification actually distinguished the 1981 "instruct and information signals" from the 1981 "programming." Namely, applicants' past 1981 parent specification leaves no doubt that said 1981 "instruct and information signals" constituted ancillary/auxiliary signaling that was "associated" with, and embedded within, said TV/Radio "programming"; i.e. that the information and instruct

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signals were distinctly different from "programming". This fact is self-evident in the following excerpts taken from applicants' 1981 parent specification:

"One method provides a technique whereby a broadcast or cablecast transmission facility can duplicate the operation of a television studio automatically through the use of instructions and information signals embedded in programming either supplied from a remote source or sources or prerecorded" (emphasis added)

[lines 32-37 of column 3]³²

"Signal processor, 71, has means, described above, to identify and separate the instruction and information signals from their associated programming and pass them, along with information identifying the channel source of each signal, externally to code reader, 72." (emphasis added)

[lines 3-7 of column 11]

"The cable head end facility contains signal strippers, 81, 85, and 89, of which models exist well known in the art, that controller/computer, 73, can instruct to remove signals from the programming as required, and signal generators, 82, 86, and 90, also known in the art, that controller/computer, 73, can instruct to add signals to programming as required"

[lines 36-42 of column 12]

"One particular advantage of these methods for monitoring programming is that, by locating the identifier signals in the audio and/or video and/or other parts of the programming that are conventionally recorded by, for example, conventional video recorders, ..."

[lines 25-29 of column 16]

³² Citations have been obtained from US Patent #4,694,490.

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"Methods for Governing or Influencing the Operation of Equipment that is External to Conventional Television and Radio Sets by Passing Instructions and Information Signal that are Embedded in Television and Radio Programing Transmissions to Such External Equipment" (emphasis added)

[Lines 34-38 of column 17]

"Signal processor apparatus have the ability to identify instruction and information signals in one or more inputted television and radio programing transmissions" (emphasis added)

[lines 39-41 of column 17]

"Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission....These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays..." (emphasis added)

[lines 42-49 of column 19]

"At this point, an instruction signal is generated in the television studio originating the programming and is transmitted in the programming transmission" (emphasis added)

[lines 60-63 of column 19]

Given the above, it is ridiculous for applicants to suggest that the term "programming", e.g. in the context of the past 1981 specification, referred to the "instruct and instruction signals" of applicant' past 1981 disclosure. It is even more ridiculous for applicant to suggest that it referred to "computer software".

B) It also seems clear from applicants' 1981 past parent specification that the "microcomputers" on the receiver side of the disclosed 1981 inventions were "***preprogrammed***" with the "computer programming/software" which told then *how to respond* to detected "instruct signals" that were embedded within received TV/Radio "programming." More specifically, it seems apparent that each of the 1981

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"instruct signals" of applicant's 1981 inventions represented typical cuing-type signals/commands which instructed/triggered "**preprogrammed**" microcomputers to execute respective portions of its preprogrammed software in order to perform predefined task/operation (e.g. the 1981 "instruct signals" told the 1981 microcomputers "to generate the overlay" whereas the pre-loaded 1981 computer software told said 1981 microcomputers "how to generate the overlay that was to be generated").³³

"Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission....These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays..." (emphasis added)
[lines 42-49 of column 19]

Again, contrary to applicants' erroneous assertions, there is absolutely no teaching in applicants' past 1981 specification indicating that applicants' 1981 "instruct signals" represented "computer software/programming" in any conventional sense of such terminology.

C) The past 1981 parent specification does not even offer/provide a signaling mechanism and/or structure which would have been capable of handling the large continuous sequence of data bytes required to push "computer software" through TV and/or Radio networks. Such a signaling mechanism and structure was not provided until "SPAM" packeting was introduced via applicants' subsequently filed instant 1987 CIP

³³ This being even more apparent when one reads the teaching of applicants' past 1981 Parent specification in light of the "enhanced and improved" teachings of applicants' 1987 CIP specification (i.e. a 1987 specification in which cuing-type signaling was enhanced/improved by the added ability of the 1987 systems to re-program downstream devices via downloaded computer software).

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specification. Thus, applicants' past 1981 parent specification was not enabling of the alleged "computer programming/software" feature (i.e. the alleged "computer programming/software" feature that the past 1981 specification did not even describe/disclose).

Clearly, applicants' 1981 definition and use of the term "programming" did not described or imply the presents of computer software/programming in any conventional sense of the terminology; i.e. it was in fact only used to described and refer to radio and television shows.

16) On page 150 of the amendment filed 1/28/2002 in 08/470,571, applicant states:

"The 1981 specification states:

It is the object of this invention to unlock this potential by the development of means and methods which permit programming to communicate with equipment that is external to television receivers and radio receivers, particularly computers and computer peripherals such as printers

1981 Spec., Col. 1, ll.36-41

Thus applicants' 1981 specification makes it clear that 'programming' is not just TV and Radio shows- it can also include instructions, codes, and signals that are communicated to and control e.g., computers and computer peripherals. These instructions, codes, and signals clearly fall within the definition of programming and to find otherwise is to conveniently and purposefully overlook the entire purpose of the invention.

(emphasis added)

In reading applicants' 1981 Specification, it seems that "**the entire purpose**" of *the invention*³⁴ to which applicant alludes was the ability to provide multimedia presentations in which TV or Radio "programming" was displayed along with another supplemental media presentation; wherein the content of the

³⁴ The examiner notes that applicant's 1981 inventions appear to serve many purposes. Therefor, the examiner does not believe that "the invention" of applicant's 1981 specification has one "entire purpose" as is now alleged by applicant; i.e. if it does have one "entire purpose", then it is not clear to the examiner what that "entire purpose" actually is (clarification is requested).

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supplemental media presentation was related to the content TV and Radio "programming" thereby *enhancing* the content of the displayed TV and Radio "programming". To achieve this goal, ancillary "instruct signals" and/or other ancillary "information signals" were "associated" with, and "embedded" within, the TV or Radio "programming." These embedded "instruct and information signals" allowed received TV and Radio *programming* "to communicate" with equipment that was external to the TV and Radio receivers in order to produce the supplemental media presentation. Specifically, the associated "instruct and information signals", which were embedded within the received Radio or TV "programming", were themselves transferred to the external equipment thereby causing the external equipment to produce said supplemental media presentation. Being such, despite applicants' current allegations, it is still crystal clear from the 1981 disclosure itself that the 1981 "programming" terminology was used in the 1981 specification in the conventional sense of referring to TV and Radio signaling which represented scheduled TV and Radio shows. To suggest otherwise, e.g. in the words of applicant, is to "*conveniently and purposefully*" ignore the fact that applicants' 1981 specification clearly describes the associated "instruct and information signals" as separate/distinct entities with respect to the TV and Radio "programming" into which these associated "instruct and information signals" were embedded:

"One method provides a technique whereby a broadcast or cablecast transmission facility can duplicate the operation of a television studio automatically through the use of instructions and information signals embedded in programing either supplied from a remote source or sources or prerecorded" (emphasis added) [lines 32-37 of column 3]³⁵

"Signal processor, 71, has means, described above, to identify and separate the instruction and information signals from their associated programing and pass them, along with information identifying the channel source of each signal, externally to code reader, 72." (emphasis added) [lines 3-7 of column 11]

"The cable head end facility contains signal strippers, 81, 85, and 89, of which models exist well known in the art, that controller/computer, 73, can instruct to remove signals from the programing as required, and signal generators, 82, 86, and 90, also known in the art, that controller/computer, 73, can instruct to add signals to programing as required" (emphasis added) [lines 36-42 of column 12]

³⁵ Citations have been obtained from US Patent #4,694,490.

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"One particular advantage of these methods for monitoring programming is that, by locating the identifier signals in the audio and/or video and/or other parts of the programming that are conventionally recorded by, for example, conventional video recorders, ..." (emphasis added)
[lines 25-29 of column 16]

"Methods for Governing or Influencing the Operation of Equipment that is External to Conventional Television and Radio Sets by Passing Instructions and Information Signal that are Embedded in Television and Radio Programing Transmissions to Such External Equipment" (emphasis added)
[Lines 34-38 of column 17]

"Signal processor apparatus have the ability to identify instruction and information signals in one or more inputted television and radio programing transmissions" (emphasis added)
[lines 39-41 of column 17]

"Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission....These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays..." (emphasis added)
[lines 42-49 of column 19]

"At this point, an instruction signal is generated in the television studio originating the programming and is transmitted in the programming transmission" (emphasis added)
[lines 60-63 of column 19]

17) Applicants clearly failed to carry their original 1981 disclosure forward into the instant 1987 disclosure.³⁶ Because of this, applicants have forfeited their right to now claim any of the subject matter that was set forth in this disclosure of his originally filed 1981 parent application, but was not carried forward into the disclosure of their originally filed 1987 parent application.³⁷ Thus, APPLICANTS ARE CLEARLY WRONG when they alleges that he can secure a 1981 priority

³⁶ The examiner notes that applicant failed to incorporate the original disclosure from his 1981 parent application into the original disclosure of his 1987 parent; i.e. the 1981 disclosure was neither formally copied into the 1987 disclosure nor was the 1981 disclosure "incorporated by reference" into the 1987 disclosure. The original 1987 disclosure simply replaced the 1981 disclosure as "THE INSTANT DISCLOSURE" from which all section 112 issues must be analyzed.

³⁷ As evidenced by arguments before the ITC (investigation #337-TA-392), even applicant and/or his counsel seemed unsure as to exactly what subject matter from applicants' 1981 parent ("if any") made it into applicants' 1987 disclosure.

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date for that which is now claimed by showing "possession" of that which is now claimed via the original disclosure of their 1981 parent application alone (i.e. NOT for the subject matter that was left behind via the filing of the 1987 CIP!). Specifically, not only must applicants show that they possessed the subject matter that is now claimed with respect to the original 1981 disclosure but, more importantly³⁸, applicants must first show possession of the same claimed subject matter with respect to the instant 1987 disclosure alone. Stated another way, to secure priority, applicants must be able to show that they did not forfeit their right to claim the subject matter possessed (i.e. *described*) in his originally filed 1981 parent application by showing, *independently*³⁹, that they possessed (i.e.

³⁸ "More important" in the sense that applicants are prohibited from now claiming anything that is not fully supported in accordance with all of the requirements of section 112-1 by the present disclosure (e.g. the disclosure that was originally filed by applicant in 1987). Specifically, the present claims fall under section 112-1 if they are not fully supported by the present 1987 disclosure even if they were, by some chance, fully supported by the disclosure of the earlier 1981 parent.

³⁹ If applicants had formally/properly incorporated the written description from his 1981 parent application into his originally filed 1987 disclosure, then there would be no need for these "independent" showings; i.e. applicants could have established "possession" via the originally filed disclosure of their 1981 application alone. It is only because applicants failed to formally/properly incorporate the written description from his 1981 parent into their originally filed 1987 disclosure, that such "independent" showings of "possession" are needed; i.e. because the actions taken by applicants have in fact caused the forfeiture of their right to now claim

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described) this same subject matter at the time they filed the instant 1987 CIP specification too; i.e. that a description of this same subject matter had in fact been carried forward.

that subject matter from their 1981 disclosure which was not carried forward into the 1987 application.

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18) Applicant are only entitled to claim subject matter which was set forth within the originally filed 1987 disclosure of his present application in accordance with ALL of the requirements of section 112-1. Specifically, the examiner refutes applicants' allegations that the original disclosure of his 1981 parent application can be used in place of the instant 1987 disclosure to meet one or more of the section 112-1 requirements (namely, to establish "possession" of that which is now claimed). It is only after proper section 112 support (i.e. including "possession") has first been established for the pending claims from the disclosure of the present application (the 1987 disclosure), that there is even a need to consider applicants' 1981 parent application at all. Simply put, if the pending claims are not supported under section 112-1 by applicants present disclosure as originally filed, then the pending claims themselves fail to comply with the requirements of section 112-1 and no further questions need be asked⁴⁰. Again, because applicants failed to formally incorporate their 1981 disclosure into their 1987 disclosure, applicant is prohibited from relying on their 1981 disclosure to supplement their present 1987 disclosure (i.e. at least as far as complying with the requirements of section 112-1 is concerned). Stated another way, because applicants' 1981 parent application was never formally incorporated into applicants' present 1987 disclosure, it does not constitute part of applicants' 1987 disclosure, i.e. the 1987 disclosure alone is the *instant disclosure*, from which all section 112-1 support for the currently pending amended claims must be derived.

19) As was noted above, applicants do not believe that "common subject matter" is a requirement for priority under section 120.

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim." (emphasis added)

[Page 141 of applicants' response filed on 1/28/2002 in application S.N. 08/470,571]

⁴⁰ At least with respect to the issue of "adequate written description".

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"Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of 'common subject matter.'"

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

Being such, applicants do not even pretend/contend that the subject matter that is now being claimed in his many applications represents "common subject matter" that exists between the instant 1987 CIP specification and the past 1981 parent specification. Instead, applicants are content to allege the benefit of section 120 priority for that which is claimed based only on alleged "correlated subject matter" between his 1987 and 1981 specifications; e.g. NOTE:

- a) That Appendix C of applicants' response filed 6/7/2000 in 08/470,571 sets forth alleged "correlations" between respective 1981 and 1987 disclosures; and
- b) That the claim by claim showing of alleged 1981 and 1987 section 112 claim support in Appendix A of applicants' response filed 6/7/2000 seem to regurgitate many of the alleged "correlations".

The examiner, on the other hand, maintains that "common subject matter" is a requirement of section 120. Thus, the examiner maintains that applicants' allegations pertaining to the existence of "correlated subject matter" are irrelevant to the issue of section 120 priority because "common subject matter", not "correlated subject matter", is required under section 120. As noted above, it appears that applicant has confused the "anticipation" requirement of section 102 with the adequate written description requirement of section 112-1; wherein it is the requirements of section 112-1, and not of section 102, that have been literally incorporated into section 120.

An extreme example of just how far applicant has twisted section 120 in an effort to obtain the 1981 priority date for ones of the pending amended claims can be found in the claim chart for claim 123 within APPENDIX A of applicants' response filed 6/7/2000 in SN 08/470,571. In this claim chart, applicant alleges that the recitations of claim 123 find section 112-1 support via the "Super Discount Supermarkets" embodiment of the instant 1987 disclosure while

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alleging that this claimed 1987 "Super Discount Supermarkets" embodiment is entitled to the 1981 filing date of the parent application based on the 1981 "Wall Street Week" embodiment. The examiner disagrees. Specifically, the examiner maintains that the 1987 "Super Discount Supermarkets" embodiment and the 1981 "Wall Street Week" embodiment do not constitute "common subject matter" and therefore the claimed 1987 "Super Discount Supermarkets" embodiment is not entitled to the 1981 filing date of the 1981 "Wall Street Week" embodiment as alleged.

20) In lines 3-7 on page 11 of the supplemental response filed 5/06/2002 in SN 08/470,571, applicant states:

"[T]he starting point for determining whether an applicant is entitled to priority under section 120 is what is being claimed. Without identifying precisely what is being claimed, it is impossible to seriously undertake an analysis of whether sufficient support exists in both applications thus entitling applicants to a 1981 priority date." ⁴¹

The examiner agrees. However, the examiner continues to be surprised that applicant raises this issue after all of the section 112-1 requests which have been made by the Office throughout the present prosecution in hopes of getting applicants' clarification as to *precisely what it is* that applicants now claim. In fact, the Office continues to struggle in its efforts to make such determinations for the 10,000 or so pending amended claims that currently exist. In the past, when applicant has been asked to identify "*precisely what is being claimed*", applicant has declined ⁴² to provide such showings instead opting to take the positions:

A) That it is the examiner's job, not applicants', to read and understand the 557 pages of applicants' current 1987 CIP specification in order to

⁴¹ The examiner agrees with applicants' position noting that, without being able to identify precisely what it is that is being claimed, it is impossible to seriously undertake many other examining related activities too.

⁴² A notable exception being the most helpful claim charts of alleged "dual" section 112 support which applicant has, only on a few occasions, been willing to kindly provide [e.g. APPENDIX A in the amendment filed 6/7/2000 in 08/470,571].

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determine "precisely what it is being claimed" via applicants' 10,000 or so pending claims; and

B) That at least some of the limitations of applicants' 10,000 or so pending claims may in fact be directed to subject matter that is not described within in the instant 1987 CIP specification.

"the [examiner's] assumption that 'all limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure' is mistaken and wholly unsupported." ⁴³

[lines 8-10 on page 144 of the amendment filed in 08/470,571 on 1/28/2002].

Hence applicant does not wish to cite, or perhaps is unable to cite, section 112-1 support from the instant CIP disclosure for these limitations [e.g. in at least one instance, applicant expressed a fear that a court, at some later date, might actually hold the scope/meaning of his claims' limitations to the identified subject matter from the instant 1987 CIP specification].

In regard to the section 112-1 issue that has now been raised by applicant, the examiner continues to take the following positions:

⁴³ Contrary to applicants' position, the examiner maintains that a pending claim must necessarily be directed to that which is described in the instant 1987 specification. This is not to say that the resulting scope of the pending claims is limited only to that of the 1987 specification to which it must necessarily be directed.

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A) It has always been a desire of the examiner/PTO to determine "precisely what it is" that applicants now claim. Being that it still remains so unclear as to "precisely what it is" that applicants now claim, clarification on the part of applicants is once again formally requested for all of the 10,000 or so pending claims. For the record, the current examiner has found applicants' claim charts of alleged "dual" section 112-1 support to be the most helpful form of aid that applicant has provided to date because it at least attempts to match each claimed limitation to the specific teachings in the specification(s) that they are allegedly directed;⁴⁴ and

B) The examiner continues to adopt positions expressed by Judge Luckern at the ITC:

1) "that the specification of the '277 patent [the 557 pages of the instant 1987 specification] is difficult to understand, as it is dealing with many possible systems";

2) "that despite complainant's [i.e. the current applicants] attempts to point to the specification of the '277 patent [the 557 pages of the instant 1987 specification] as illustrative of some claim elements, said specification has not been helpful in connecting individual claim language to distinct statements in the specification of the '277 patent that is supposed to provide an explanation of the claimed systems in issue";

3) "that complainant's [i.e. the current applicants] assertions in many instances of where support in the specification of the '277 patent [the 557 pages of the instant 1987 specification] can be found for claimed elements 'reads like the directions to a treasure hunt. There's a piece here, there's a piece there, it's in there somewhere.'"; and

⁴⁴ The process of showing a limitation-to-disclosure match for each limitation of each claim should be an easy task for applicant, if not a trivial one, being that the currently pending claims must be "clearly/unambiguously described" by applicant's instant disclosure.

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4) " that the specification of the '277 patent [the 557 pages of the instant 1987 specification] and the claims in issue 'are like ships passing in the night in the same ocean, but not necessarily sailing in the same direction."

[SEE: 1997 ITC Lexis 307, *258 (part I of II)]

Once again, the examiner hereby requests applicants' help in determining "precisely what it is" that applicant now claims.

21) The examiner notes that the "SPAM" technology, on which the "more sophisticated" systems of applicants' present 1987 disclosure are based, is vastly different from the "cuing-type signal" technology on which the "primitive" systems of applicants' 1981 parent application were based; e.g. the ability of SPAM to carry and distribute "software" being but just one of the more notable differences. Clearly, the "more sophisticated" 1987 alleged inventions that are now *necessarily being claimed* are not entitled to the 1981 filing date of their 1981 "primitive" ancestors; i.e. applicants are not allowed to transport his "more sophisticated" 1987 alleged inventions back in time to the 1981 filing date of his different, albeit sometimes "correlated", "primitive" 1981 alleged inventions.

22) The issues cited above illustrate a further dilemma that the examiners have faced when trying to read and understand that which is now being claimed by applicants. Specifically, terminology which might seem definite when one looks to the instant 1987 disclosure alone, becomes confusing and indefinite when read in light of applicants' responses; responses in which applicants have applied newer 1987 interpretations/definitions to the claims in order to establish section 112-1 support and have applied older and different 1981 interpretations/definitions to the same claims in order to obtain the 1981 priority date for the recitations (this approach is evident throughout appendix A of applicants' last response). Thus, at times, it seems to be the record itself that has, or that has at least contributed to, making the meaning/scope/support of the claims' recitations so unclear. It must also be noted that the claim recitations themselves often appear to be contorted in an apparent attempt to craft them to read independently on different teachings from the two (1981 and 1987) disclosures.⁴⁵ Not only does this process results in claim limitations that are

⁴⁵ For example, some of applicants' claims have recited "downloadable processor instructions which has no antecedent basis in either of the originally filed

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difficult to read in that they do not quite fit teachings from either disclosure, but more importantly, the effort involved in this process is wasted effort because the subject matter being claimed/referenced in the two disclosures is not "common subject matter"; e.g. the claims are not entitled to the 1981 filing date even if it could be shown that they can be read on respective (but different) subject matter from the two disclosure (a situation that is also quite evident from appendix A of applicants' last response). Again, it appears that applicants are confusing the requirements of "anticipation" that exist under section 102 with the requirement of "adequate written description" that exists under section 112-1 as incorporated into section 120.

23) Judge Rich has taken the position that "continuity of disclosure", needed to establish the benefit of priority under section 120, requires continuity of "common subject matter" in a form that meets all of the requirements of section 112-1; e.g. even continuity of "best mode".

"It must be understood that the introduction of a new best mode disclosure would constitute the injection of 'new matter' into the application and automatically deprive the applicant of the benefit of the earlier filing date of the parent or original application for any claim whose validity rests on the new best mode disclosure".

TRANSCO [38 F.3d 551; 32 U.S.P.Q.2D (BNA) 1077]

1987 and 1981 disclosures. Yet it appears that this recitation could, quite properly, be read on the originally described "program instruction sets" (e.g. downloaded software) of applicants' instant 1987 disclosure. However, when one looks at appendix A of applicants' last response, one finds that applicants have attempted to read the recitation not on the originally described "program instruction sets" of the instant disclosure, but instead on respective (and different) commands/instructions from the 1981 and 1987 disclosures both of which functioned only to trigger actions/operations on the receiver side. Applicants resort to this interpretation apparently out of recognition that the "program instruction sets"/software of the instant 1987 disclosure has no equivalent in the 1981 disclosure. What results from this process is a claim which looks like it is literally directed to the downloading of software that was described only in the 1987 disclosure, and yet has been afforded the 1981 effective filing of a parent application in which such a feature was not disclosed (effectively transporting the 1987 "downloading of software" feature back in time to the 1981 date of the parent application in which it was not disclosed); i.e., the respective descriptions do not constitute "common subject matter" as required for priority under section 120.

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This Judge's position is NOT consistent with applicants' position that section 120 does not require "common subject matter" between applications; further evidencing the fact that applicant has confused the issue of "anticipation" under section 102 which the requirements of section 112-1 that have been incorporated into section 120.

[The "best mode" issue under section 120 has been raised by the examiner to show a further inconsistency that exists between applicant's position concerning the requirements of section 120 priority and the positions that have been held by the courts. The examiner has not, and never intends, to make a rejection under "best mode". In fact, it is the examiner's belief that the "best mode" was disclosed by applicants in each of their 1981 and 1987 disclosures. The problem is that the "best mode" of the 1987 disclosure may in fact differ from the best mode of the 1981 disclosure (e.g. 1987 SPAM signaling v. 1981 trigger signals, etc,...). To the extent that this is true, as noted by Judge Rich, such alone is enough to deprive applicants' current claims of the 1981 priority date; i.e. again, further refuting the "anticipation" standard of claim that continues to be argued by applicants (see appendix I of this Office action)].

24) At times, applicants seem to be of the opinion that *only* the "enablement" requirement of section 112-1 applies to the issue of "continuity". At other times, applicants seem to be of the opinion that *only* the "description" requirement of section 112-1 applies to the issue of "continuity". On its face, one of these two positions must be wrong (i.e. they are mutually exclusive). It is the examiner's understanding that both positions are wrong. As evidenced above, *ALL* of the requirements under section 112-1 seem to apply to the issue of "continuity" (e.g. even "best mode"). Being such, applicants are only entitled to the benefit of an earlier filing date for claims that are directed to "common subject matter" for which "continuity" has been maintained between the present and the earlier filed application. "Continuity of common subject matter" exists between applications only when there is:

A) Continuity of "written description" between applications for the subject matter being claimed (as defined under section 112-1);

B) Continuity of "enablement" between applications for the subject matter being claimed (as defined under section 112-1); and

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C) Continuity of "best mode" between applications for the subject matter being claimed (as defined under section 112-1).
[note sections 14 and 15 above]

Being such, none of applicants' currently pending amended claims are entitled to the priority date of applicant's 1981 parent application in that the claims are not directed to "subject matter"⁴⁶ for which there is has been:

- a) the required continuity of "written description" between applications;
- b) the required continuity of "enablement" between applications; and
- c) the required continuity of "best mode" between applications.⁴⁷

⁴⁶ The "subject matter" currently being claimed corresponds to "the description" of the pending amended claims as set forth in the 557 pages of the instant 1987 CIP specification from which they depend. Obviously, for reasons that have been addressed throughout the record, the 1987 "subject matter" that is currently described is different from the 1981 "subject matter" which was described in the 44 pages of the 1981 parent specification; i.e. evidencing the lack of continuity in "common subject matter" with respect to that which is now claimed.

⁴⁷ e.g. applicants have argued that he was under no obligation to update their earlier filed disclosure with their "new best mode" when they originally filed the present CIP disclosure. The examiner strongly agrees. However, to maintain continuity between applications, applicants were required to (at least) carry forward their "old best mode" from of their earlier filed application into the originally filed 1987 disclosure if "continuity" of disclosure was to be maintained. It seems that applicants have failed to do this and therefor have not maintained "continuity of disclosure". For example, as was noted in part "13" of this appendix, the "old best mode" of applicants' 1981 parent application was based exclusively on primitive 1981 cuing technology while the "new best mode" of applicants' present application is based exclusively on the more sophisticated 1987 "SPAM" technology (i.e. for all intents and purposes, "extended" Teletext technology). In view that the primitive 1981 cuing technology was not carried forward into the present 1987 application, e.g. applicants' new 1987 disclosure literally replaced applicants' earlier filed 1981 disclosure in its entirety, the "old best mode" was in fact left behind (i.e. it had to be!). For this reason alone, the pending amended claims are not entitled to the 1981 priority date of applicants' parent application. Again, the pending amended claims are necessarily directed to the systems/methods of applicants' present 1987 disclosure that is based on the more sophisticated "SPAM" technology". Accepting applicants' claim to a 1981 priority date for these pending amended claims would allow applicant to transport claims which are necessarily directed to the 1987 disclosure/technology back in time to the 1981 date of the earlier disclosure/technology. Using this scheme, applicants

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25) It is understood that CIP practice, when properly utilized, allows an applicant to file a new application containing additional/new subject matter while preserving the applicants' right to claim (and the right to the earlier filing date for) subject matter which was previously disclosed in the parent application. But an applicants' right to claim subject matter from the parent application is only preserved for that subject matter of the parent application which has actually been carried forward (e.g. *incorporated*) into the disclosure of the CIP. Any and all subject matter from the parent application that is not carried forward into the disclosure of the CIP cannot be legally claimed within said CIP; i.e. the right to claim subject matter that is left behind is lost/forfeited with respect to said CIP application. To prevent such a loss/forfeiture, it is customary for an applicant to draft the disclosure of his CIP application in a manner that it literally incorporates the entire disclosure of the parent application, e.g. either physically or "by reference", thereby literally carrying forward all of the subject matter from the parent application into the CIP application and, in doing so,:

- A) Preserving applicants' right to claim any/all of the subject matter from the parent within said CIP application; and
- B) Preserving applicants' right to the filing date of the parent application for any/all claims that are directed to the subject matter of the parent application that has been carried forward into the CIP application.

would be able to improperly transport claims directed to their new 1987 "best mode"/technology back in time to the 1981 date of their "old best mode"/technology.

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In contrast to the customary CIP practice described above, when filing his 1987 CIP disclosure, the present applicants elected to draft an entirely new specification and elected not to formally incorporate the disclosure from their 1981 parent application in its entirety. In fact, when filing their 1987 CIP disclosure, applicants elected to draft the entirely new specification in a way which makes it difficult to impossible to determine what, if any, of the subject matter from the 1981 parent specification was carried forward into the disclosure of the 1987 CIP ⁴⁸. Today, faced with the fact that subject matter which was not carried forward (i.e. *incorporated*) into the present disclosure has been lost/forfeited, applicants takes a leap of faith and suggest that all of the subject matter from his 1981 parent application somehow/miraculously found its way into the new disclosure of the 1987 CIP. Clearly, this is not true. When one studies the two disclosures in detail, one actually finds that little to none of the subject matter from the 1981 parent made it into the 1987 CIP disclosure in a form that constitutes "common subject matter". For example, even the subject matter from the two disclosures which looks similar at first glance, is based on vastly different transmission technologies, vastly different terminology/definitions, vastly different "best modes", etc.,.... [e.g. note Appendix II of the Office action mailed 8/27/01 in SN 08/470,571].

⁴⁸ For example: the 1987 CIP appears to have injected a "new best mode disclosure" by literally replacing the 1981 inventions with new 1987 inventions which are based on a more sophisticated technology (i.e. SPAM). If true, this by itself, is enough to refute all of applicant's claims of priority to the 1981 filing date (i.e. in the words of Judge Rich).

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26) In the past, applicant seems to have suggested that even if one were to find that applicants' 1981 disclosure had not been carried forward into applicants' later filed 1987 disclosure, one/applicant could still rely on said 1981 disclosure to provide an understanding of the later filed 1987 disclosure with respect to issues under section 112. The examiner notes that only "prior art" can be used for such purposes. Therefor applicants' 1981 can only be used to clarify/supplement his 1987 disclosure if it is found to be "prior art" with respect to the 1987 disclosure. But if the 1981 disclosure is "prior art" for purposes of section 112 (i.e. for the purpose of understanding the later filed 1987 disclosure), then it must be "prior art" for issues under sections 102 and 103 too. Thus, for applicant to suggest that his 1981 disclosure be used as "prior art" for the purpose of understanding his 1987 disclosure seems to put applicant, at least potentially, on a very slippery slope; i.e. because if applicants' position were ever *legally* accepted, then applicants' 1981 disclosure would *legally* become "prior art" against the 1987 disclosure for sections 102 and 103 issues too. ⁴⁹

27) The examiner notes that many of applicants' pending claims recite the following receiving station structures: a) a receiver; b) a signal detector; c) a processor; and d) an output device. Appendix A of the response filed on 6/7/2000 in SN 08/470,571 shows that:

a) the recited "receiver" refers to nothing more that --a TV tuner--;

⁴⁹ For the record: applicants' 1981 disclosure does not constitute "prior art" with respect to applicants' 1987 disclosure and therefor cannot serve as "prior art" for any purposes. Thus, applicants' 1981 disclosure cannot be used to supplement ones understanding of applicants' 1987 disclosure, with respect to issues under section 112-1, as seems to have been improperly suggested by applicant in the past. Specifically, with respect to section 112 issues, applicants' 1987 disclosure stands alone.

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b) the recited "signal detector" refers to nothing more than a decoder 203 which extracts and error corrects embedded information from the VBI of TV programming;

c) the recited "processor" refers to nothing more than microcomputer 205; and

d) the recited "output device" refers to nothing more than a "TV monitor".

The examiner maintains that all of these recited structures are found within a conventional CPU/MP/computer implemented Teletext receivers. For example, note:

a) the TV tuning element (2);

b) the extracting and decoding circuitry 8 and 11;

c) the processing element (13); and

d) the TV monitor/display (6), of BETTS [GB 1,556,366].

Such further highlights the direct correlations that exists between the "SPAM" distribution system of applicants' alleged invention and the "Teletext" distribution systems of the "prior art". Again, the examiner believes that applicants' "SPAM" is, for all intents and purposes, synonymous with conventional "Extended Teletext" [note part "5" of this appendix];

28) Applicants' originally filed instant disclosure clearly taught away from the "interactive" ultimate receiver station configuration which has been claimed during the present prosecution [note claim 56 as presented in the amendment filed 6/7/2000 and 7/13/2000 in 08/470,571]. Namely, as originally described, one of the key advantages that was allegedly offered by applicants' alleged inventions was the fact that the "ultimate receiver stations" produced their respective personalized audio/video presentation "automatically" and without any manual input from the viewer; e.g. whereby the complex processing that was involved within the system remained hidden from, and transparent to, the viewer/user. SEE:

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A) lines 27-34 on page 11 of applicants' instant disclosure as originally filed;

B) lines 18-20 on page 91 of applicants' instant disclosure as originally filed;

C) lines 13-34 on page 427 of applicants' instant disclosure as originally filed;

D) etc,...

Despite this original teaching, applicant has subsequently attempted to introduce pending amended claims into the record that, according to applicants' own allegation (see the support for claim 56 as was set forth in APPENDIX A of the amendment filed on 6/7/2000 in SN 08/470,571), recite an "interactive" implementation of the originally disclosed non-interactive "ultimate receiver stations". The section 112-1 problem is immediately apparent [this issue has been addressed in detail in sections II and VI of the Office action mailed 7/17/2002 in SN 08/470,571].

29) As originally described, it appears that the "ultimate receiver stations" of applicants' alleged invention produced the combined image of applicants' figure 1C by (apparently) additively mixing the images of figures 1A and 1B in their entirety; i.e. this fact seems to explain why the "line" of figure 1A had to be produced "on a background color that is transparent when overlaid on a separate video image" as was described in applicants' originally filed disclosure [see lines 9-14 on page 25 of applicants' instant disclosure]. Despite this original teaching, applicant has attempted to introduce claims which explicitly recite processes in which the respective images are combined in less than their entirety and/or in which one portion of one image is "replaced" by a portion of another (i.e. known in the art as "keying" or "non-additive mixing". The section 112-1 problem is immediately apparent [this issue has been addressed in detail in section VI of the Office action mailed 7/17/2002 in SN 08/470,571].

30) In the first two lines under the heading "*a. Independent Claim 56 and Dependent Claims Thereto*" on page 287 of the response filed 1/28/2002 in SN

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08/470,571, applicants allege that the publication date of the applied Gunn et al article was never established by the Office. This allegation is untrue. The following is noted:

- a) This Gunn et al. article was originally submitted by applicants for consideration within voluminous IDS citations. However, as with many of these citations, applicants never provided the Office with information regarding the publication date of the article;
- b) The Gunn et al. article has been applied by the Office against many of applicants' pending claims, and while applicant never provided the Office with the article's publication date, the Office was able to establish the date in question and notified applicant of it accordingly [note: the PTO- 892 of paper #2 in the present 08/470,571 record; the PTO-892 of paper #20 in SN 08/447,502; etc,...];
- c) Again, the publication date for this Gunn et al. article, e.g. an article that was submitted by applicant for consideration against the pending amended claims, is March 26-28 of 1980. This date is, by any standard, valid "prior art" against all of applicants' pending claims.

31) In the first four lines on page 15 of the supplemental response filed 5/6/2002 in 08/470,571, applicants state:

"applicants further questioned [the examiner as to] why it would be necessary to incorporate the parent disclosure, by reference or in full-text format, if the subject matter of the parent application is properly disclosed in the CIP application in an integrated manner with the enhancements and improvements of the CIP application." (emphasis added)

That depends on what applicants mean by "*properly disclosed*." According to applicants, "*properly disclosed*" does not require that the claims be supported by "common subject matter" found in both applications.

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims

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for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim."

(emphasis added)

[Page 141 of applicant's response filed on 1/28/2002 in application S.N. 08/470,571]

In contrast, the examiner maintains that "*properly disclosed*" requires continuity of "common subject matter" between applications for that which is claimed. Being such, if there is any way by which current applicant can use the section 112-1 support that is actually available in the instant 1987 CIP disclosure to "properly" show that the currently pending claims are in fact directed "solely" to 1981 subject matter previously described in the past 1981 Parent specification, i.e. "common subject matter", then section 120 priority would be a "*given*". To date, applicant has been unable to provide such a showing.⁵⁰ Here, it is important to note that a direct path to such a "*proper*" showing would have been available to the current applicants had the *unenhanced/unimproved* subject matter from the past 1981 specification *actually* been incorporated into

⁵⁰ This is not a situation in which the "wording" that was used to described "common subject matter" has simply been changed between applications as applicant would now try to have one believe [note lines 7-11 on page 15 of the supplemental response filed in 08/470,571 on 5/6/02]. Instead, it is a situation in which "1981 inventions" from the 1981 specification were left behind at the time of filing the instant 1987 CIP specification in favor of the enhanced/improved/expanded "1987 inventions" which are actually described within the instant 1987 CIP disclosure; a fact that is clearly self-evident whenever applicant attempts to specifically demonstrate "dual" 1987 and 1981 section 112-1 for that which is claimed [e.g. as is exemplified via Appendix A of the amendment filed 6/7/2000 in 08/470,571] .

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the instant specification in a distinct and discernible fashion. This is, in essence, the answer to the question that has been asked by applicant.

"applicants further questioned why it would be necessary to incorporate the parent disclosure, by reference or in full-text format"

[the first four lines on page 15 of the supplemental response filed 5/6/2002 in 08/470,571]

Specifically, any applicant wishing to draft a claim in a later filed CIP application that is going to be directed *solely* to "subject matter" found in an earlier filed Parent application, e.g. thereby allowing the drafted claim to obtain the benefit of section 120 priority, would be wise to incorporate said "subject matter" from the parent application into the CIP specification in a clear and undisputable fashion. Incorporating the Parent specification by reference, or by literally carrying it forward in a substantially identical "full-text format", are methods that are commonly used by applicants for this purpose. And for obvious reasons, the need to "incorporate" the parent's subject matter in a clear and undisputable fashion is especially true/"necessary" if the "subject matter" of the past parent disclosure is going to be extensively "re-worded", "enhanced", "improved" and "scattered" throughout vast quantities of new subject matter during its alleged migration to the specification of a subsequently filed CIP specification.

32) Section 112-1 requires the written description to provide a description of that which is claimed. For the reasons addressed herein (e.g. the noted inconsistencies between the 1981 and the 1987 specifications), that which is described in the 557 pages of the instant 1987 CIP disclosure is very different from that which was previously described in the 44 pages of the 1981 parent. For example, the "systems and methods" that are described in the 1987 disclosure all utilize a new, more advanced, "SPAM" transmission technology which enables the 1987 systems and methods to carry a wider/broader range of control and instruct signaling (i.e. such as "software") and which also enables the 1987 systems and methods to be applied to a much wider/broader range of communication environments (i.e. the 1987 systems and methods, as described, explicitly encompass application outside the radio/TV environments explicitly described for the 1981 systems and methods):

"A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the

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substance of the invention or makes the composition an invention for the first time, as opposed to the situation in which the subsequent application merely contains either a language change not effecting the meaning of the prior application or a specification which narrows the scope of that which was previously claimed. [Indiana General Corp. v. Krystinel Corp., 161 USPQ 82, 94-95]

And, because the disclosure of the 1981 was left behind by applicant's during the drafting of the 1987 CIP, it is the written description of the 1987 CIP systems and methods alone which must provide the description of the systems and methods that are now being claimed as required under section 112-1; i.e. that which is claimed necessarily being the much improved/enhanced/expanded systems/methods of the 1987 CIP specification. Why should/would these described/claimed enhanced/improved 1987 CIP systems and methods be entitled to the 1981 filing date of the lesser 1981 systems and methods that were previously described in the 1981 parent specification that was literally left behind (abandoned) during the drafting of the instant 1987 CIP specification? By abandoning the 1981 specification (leaving it behind during the drafting of the 1987 CIP), it is difficult if not impossible for applicants to alleged that that which is now claimed is directed solely to the systems and methods that were previously described in the abandoned specification of the 1981 parent (i.e. that the current claims are directed to "common subject matter").

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33) Applicants take the position that they are allowed to use the "new subject matter" that is contained only within the instant 1987 CIP specification to fulfil the section 112-1 requirement for their pending claims and yet still obtain the earlier 1981 filing date of the 1981 Parent specification for these claims by alleging that some underlying principle or teaching from the 1981 specification is buried/embedded/hidden somewhere within the cited "new subject matter".

"The fact that the [section 112-1] support [that applicant] identified in the 1987 specification for a certain [claimed] features (or limitation) also happens to include additional features or details relating to the same underlying feature (or limitation) disclosed in the 1981 specification , does not mean that both specifications do not support the feature or limitation with similar and valid 'common subject matter' support." ⁵¹

[lines 5-8 on page 10 of the supplemental response]

Here, applicants seem to suggest that it is "solely" the alleged "underlying features" from the 1981 disclosure that are being claimed by the pending claims' recited limitations, even though the passages from the instant 1987 specification that must be cited by applicant, for the expressed purpose of providing the required section 112-1 support for the claims' limitations, necessarily comprise new/added 1987 subject matter that was introduced via the filing of the 1987 CIP specification. Apparently, it is applicants' position that the added/new 1987 subject matter contained within applicants' own citations of alleged section 112-1

⁵¹ The examiner notes that the fact applicant is relying on the new "enhanced/improved" subject from his 1987 CIP to provide section 112-1 support for the claim is self-evident whenever applicant attempts to specifically show the alleged "dual" section 112-1 support for a given claim's limitations via the different specifications [e.g. as is exemplified via Appendix A of the amendment filed 6/7/2000 in 08/470,571]

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support should be weeded out, discarded and/or ignored in order to allow the alleged underlying principles, ones that were allegedly carried forward from the past 1981 parent specification, to emerge therefrom (thereby allowing applicants' subsequently filed CIP claims to obtain the earlier 1981 filing date of the parent application).

The examiner thinks not.

34) In lines 16-19 on page 15 of the supplemental amendment filed 5/6/2002 in 08/470,571, applicant boldly alleges:

"that incorporating the parent [specification], either by reference or in full-text format, into a CIP application that disclosed the subject matter of the parent in an integrated fashion does nothing more than add unnecessary duplicative content to the CIP application."

The examiner notes the following:

1) If applicant is suggesting that this is the situation that currently exists between his instant 1987 CIP specification and his past 1981 Parent specification, then the examiner suggests that applicant make the attempt to formally incorporate his past 1981 parent specification into his current 1987 CIP specification either by reference or in said full-text format in order to resolve the priority issue once and for all. Applicant is, however, put on notice that any attempt to amend the instant 1987 CIP specification in such a fashion will be vigorously objected to as introducing "NEW MATTER"; and

2) Given the present situation, having added a single a sentence to the 557 pages of text that comprise the 1987 CIP specification, stating that the 44 page specification of the past 1981 Parent application had been "Incorporated by Reference", hardly seems to fall within the realm of "add[ing] unnecessary duplicative content to the CIP application."

35) In lines 19-22 on page 15 of the supplemental amendment filed 5/6/2002 in 08/470,571, applicants allege:

"applicants' have established in their prior submissions that all of the fundamental teachings of the 1981 disclosure were carried

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forward to the CIP application, albeit in an integrated fashion with many enhancements and improvements of the CIP application."

The current examiner knows of no prior submission or submissions made by applicants which has "established", as fact, that *that* which is now claimed by applicants' currently pending amended claims is directed "solely" to "fundamental teachings" from applicants' past 1981 Parent disclosure which have been carried forward to the instant 1987 CIP specification. In fact, all attempts made by applicant to specifically identify the required section 112-1 support for the limitations of the currently pending amended claims have instead "established", as fact, that *that* which is now claimed actually comprises ones the "many enhancements and improvements of the CIP application" that are not entitled to "priority" under section 120.

36) In lines 9-12 on page 10 of the supplemental response filed 5/06/2002 in SN 08/470,571, applicants' state:

"The mere presence of the additional details and enhancement in the 1987 specification does not deprive applicant's of the 1981 priority date unless the claim limitation or feature is only supported by such additional details and enhancements which are not found in the 1981 specification."

See *Kennecot*, 835 F.2d at 1422." (Emphasis added)

[Lines 9-12 on page 10 of applicant's supplemental response filed 5/6/02]

It is not clear how the cited case law, e.g. *Kennecot*, 835 F.2d at 1422, supports applicants' apparent position that a claim in a continuation-in-part application is entitled to the earlier filing date of a past parent application if only part of its required section 112-1 support comes from "new CIP subject matter" that was introduced via the filing of a CIP specification. This would suggest a situation in which a given claim has two effective filing date such that the examiner could/should reject that portion of a pending claim's scope which is allegedly supported by the "New Matter" of a CIP via valid intervening "prior art" while, at the same time, allowing that portion of the same pending claim's "scope" that is

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directed "solely" to the subject matter of the Parent application to issue as a patent. Such a position does not make sense.

To the contrary, by claiming the benefit of section 120 priority for a given claim filed in a subsequently filed CIP application, an applicant is in essence "*pledging*" (e.g. putting everyone on notice) that the claim is directed "solely" to the subject matter that is found within the specification of the Parent application, and not to any of the "new subject matter" that has been introduced via the subsequently filed CIP.⁵²

However, such a "pledge" must be supported by the CIP specification from which the claim depends. Namely, if a claim in a CIP application is going to be directed "solely" to the subject matter of a past parent application, then said subject matter of the past parent application must exist within said CIP specification being that the required section 112-1 support for the claim must necessarily come from the instant CIP disclosure. Thus, the subject matter of the parent that one wishes to claim must be carried forward from the parent specification into the CIP specification; hence the requirement of "common subject matter". However, given the current state of applicants' instant 1987 CIP specification, e.g. one in which past 1981 subject matter has been (at best) inseparably blended/expanded with subsequently added new 1987 subject matter, it impossible for one to determine what of the past 1981 subject matter, if any, has been carried forward into the instant CIP disclosure. Being such, one cannot reasonably "*pledge*"/assume that a currently pending claim are (or even could be) directed solely to the past 1981 subject matter.

"The fact that the [section 112-1] support [that applicant] identified in the 1987 specification for a certain [claimed] features (or limitation) also happens to include additional features or details relating to the same underlying feature (or limitation) disclosed in the 1981 specification , does not mean that both specifications do not support

⁵² That is, to determine what is being claimed, one turns to that which was "described" in CIP application. If that which is described in the CIP was in fact described in the parent application too (i.e. common subject matter), priority under section 120 is established.

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the feature or limitation with similar and valid 'common subject matter' support."

[lines 5-8 on page 10 of the supplemental response]

Again, why should a pending claim having limitations that are directed to even a smudge of new 1987 subject matter be entitled to the earlier 1981 filing date of the Parent specification which did not disclose that smudge of new 1987 subject matter?

"However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications" (emphasis added)

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

"Any claim in a continuation-in-part application that is directed solely to subject matter adequately disclosed under 35 U.S.C. 112 in the parent application is entitled to the filing date of the parent application."

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

"A continuation-in-part application is not entitled to the benefit of the earlier filing date of its parent application where the changes included within subsequent applications are 'new matter' which either alters the substance of the invention or makes the composition an invention for the first time, as opposed to the situation in which the subsequent application merely contains either a language change not effecting the meaning of the prior application or a specification which narrows the scope of that which was previously claimed. [Indiana General Corp. v. Krystinel Corp., 161 USPQ 82, 94-95]

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APPENDIX IV [prior art]

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I. THE AUTOMATED TV BROADCAST STATION:

During normal hours of operation, at the time of applicants' invention, the typical TV station produced and transmitted at least one continuous stream of TV programming. Each continuous stream of programming comprised a scheduled sequence of TV programming segments, wherein each segment was provided from a respective one of a plurality of TV signal sources. The TV sources included:

- 1) *TV studios;*
- 2) *TV cameras;*
- 3) *VTRs;*
- 4) *Telecine devices;*
- 5) *ATRs;*
- 6) *Network and local programming "feeds"; and*
- 7) *Combinations thereof.*

Because each transmitted stream of TV programming was generated by successively outputting program segments provided from the different TV sources, appropriate "switching" circuitry was a vital and necessary part of the typical TV broadcast station. At first, the switching of program segments and sources was performed manually by the TV station personnel. However, as the size and complexity of TV stations grew, automation of the stations' program segment/source switching operations was found to be necessary in order to eliminate the switching problems that were caused by human error. This automation was accomplished via the following TV station structure:

- 1) *The plurality of TV segment sources;*
- 2) *The required switching circuitry;*
- 3) *A real time clock or clocking circuitry;*
- 4) *A TV segment scheduling device which enabled a TV broadcast schedule to be generated, entered, and stored in some sort of memory device, whereby the stored schedule defined a sequence of switching events for controlling the plurality of signal sources and the switching circuitry to produce the continuous TV signal that was to be transmitted; and*

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5) A control device for actually producing control signals representing the time sequence of events defined by stored TV segment schedule according to the timing of the clock, whereby the produced sequence of control signals were supplied to the signal sources and the switching circuitry so as to cause the scheduled sequence of TV signal segments to be generated and combined (via the switching) to create/generate the continuous TV signal that was transmitted from the station.

The following prior art has been cited as providing illustrations of this conventional automated TV broadcast station switching structure:

- 1) U.S. Patent #3,120,652 to Weighton et al.
(note: the figure; lines 1-12 and 29-41 of column 2);
- 2) U.S. Patent #3,627,914 to Davies
(note: figures 1 and 2; lines 18-22 and 30-31 of column 1; and lines 25-29 of column 2);
- 3) The article "An Automated Programming Control System for Cable TV" by Beck et al. (presented by Stern) which was published in 1980
(note the first column of page 124)
- 4) U.S. Patent #3,825,837 to Briskman
(note: figure 1; lines 13-17 and 33-36 of column 1; lines 16-21 and 41-50 of column 3)
- 5) U.S. Patent #2,969,427 to See
(note figure 1);
- 6) U.S. Patent #4,381,522 to Lambert
(note figure 1);
- 7) Japanese Patent Document #56-51161 to Kamishima
(note: figure 1; lines 13-15 on page 3 of the translation);
- 8) The article "Automatic Switching in the CBC - an Update" by Barlow [International Broadcasting Convention, London, England (20-24 September 1976) pages 13-14]
(note the figure on page 14);

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9) The article "The Automation of Small Television Stations" by Young et al. [Journal of the SMPTE, Volume 80, October 1971, pages 806-811]

(note: figure 3; lines 10-15 in the first column of page 806; lines 2-7 in second column of page 806; lines 3-6 in the third column of page 806);

10) The article "Automatic Transmission Systems for Television" by Zborowski [SMPTE Journal, Volume 87, June 1978]

(note: figure 1; lines 2-7, 22-30, 34-36, and 47-49 in the first column of page 383);

11) The article "The Automated Television Station" by Hutchinson [Journal of the SMPTE, Volume 83, April 1974]

(note: lines 3-65 in the first column on page 295; lines 6-26 and 67-72 in the second column of page 295; lines 1-34, 48-50, and 66-72 in the third column on page 295);

12) The article "Automatic Storage and Retrieval of Videotaped Programs" by Kazama et al. [SMPTE Journal, Volume 88, April 1979, pages 221-223]

(note figure 1); and

13) The article "Microprocessor for CATV Systems" by Tunmann et al. [27th Annual NCTA Convention held in New Orleans on April 30-May 3 of 1978 (pages 70-75)]

(note: figure 1; lines 5-46 in the second column of page 70; lines 29-34 in the first column on page 71; lines 1-32 in the second column of page 71; lines 8-9 in the first column on page 73; lines 8-36 in the second column on page 73; the last seven lines of the first column on page 75).

It is noted that when the switching operation being automated was at an "intermediate" TV broadcast station location, e.g. a local or regional TV station, the TV schedule which controlled the station's automated switching process was often generated at a remote centralized TV station location (e.g. such as a network TV station location). When generated remotely, the TV schedule

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was then transported and/or downloaded to the intermediate TV broadcast station for storage and execution thereat. For example, see:

A) *The first six lines in the third column on page 806 of the above cited "The Automation of Small Television Stations" article by Young et al.;*

B) *The figure on page 14 of the above cited "Automatic Switching in the CBC - an Update" article by Barlow;*

C) *Lines 8-17 in the second column on page 73, and the last 6 lines in the first column on page 75 of the above cited "Microprocessor for CATV Systems" article by Tunmann et al.;*

D) *Lines 16-21 in column 3 of the above cited U.S. Patent #3,825,837 to Briskman;
etc,...*

When the switching operation of a TV broadcast was automated in the manner discussed above, it became difficult to monitor the operation of the automated broadcast station to be sure that the program segments were being produced and outputted according to the stored TV schedule [see lines 13-20 on page 3 of the translation of JP #56-51161 to Kamishima et al. cited above]. To overcome this problem, it was known and conventional to have provided automated monitoring circuitry within the TV station/network too. Such monitoring circuitry comprised:

A) *Encoding circuitry for embedding respective unique identification labels/tags into the TV programing segments being provided from each of the sources;*

B) *Decoding circuitry for detecting the embedded identification labels/tags that exist within the continuous TV stream that is being outputted by the TV station's switching circuitry; and*

C) *Comparing circuitry for comparing the sequence of detected labels/tags with the stored TV segment*

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transmission schedule to determine whether or not the automated station switching operation was being properly performed/executed.

[e.g. note: the actual "invention" of JP #56-51161 to Kamishima et al.; lines 11-16 on page 3, lines 3-7 on page 4, and lines 17-20 on page 8 of the Office provided translation of the document "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al. (NKH Gijutsu Kenkyu, Vol. #20, Issue #3, Entry #106, pages 1-32, 1968)].

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II. AUTOMATED TV RECORDING DEVICES:

At the time of applicants' invention, automated TV recording systems which enabled desired ones of the TV programming segments, being broadcast from respective TV stations, to be automatically recorded were notoriously well known in the art. These automated recording systems were conventionally implemented in the following manner:

A) Circuitry was provided within the TV stations for inserting TV program segment identification tags/labels into the VBI of the TV programming being broadcast;

B) Means were provided for allowing the TV stations to distribute program guides to receiver side users, e.g. guides such as the "TV TIMES", which listed the TV program segments (i.e. TV shows) which were scheduled for broadcast by the stations, wherein these distributed schedules included information which associated a unique program code with each of the listed program segments;

C) Circuitry was provided on the receiver side of the system which allowed users to enter those unique codes, as obtained from the distributed program guides, which were associated with the programs segments which the user wished to record;

E) Circuitry was provided on the receiver side of the system for monitoring the TV station's transmissions and for detecting the embedded segment identification tags/labels contained therein, whereby a TV signal recording device was actuated/triggered to automatically record the program segment being received when the embedded tag/label being monitored matched one of the unique codes which had been entered by the user.

[SEE: PCT patent document #WO 80/02093 to Vikene; the article "Code Accompanying TV Program Turns on Video Cassette Recorder in Proposed Scheme" by Gosch (Electronics, Vol. 54, No. 3, pages 80-82, February 1981); and German Patent document #2,614,188 to Jahnel (10/6/1977)]

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In such automated recording systems it was known for the recording device to have recorded the embedded identification tags/labels along with the desired TV programming segments to aid in the reproduction process. Namely, the recorded program identifiers allowed recording device itself to search and find, i.e. "automatically", the specific storage location at which each one of the desired programming segments had been recorded on the recording medium. This advantageously eliminated the need for the user to manually hunt for desired programming segments when reproduction/playback was desired. Note:

A) Lines 16-22 on page 2 of PCT patent document #WO 80/02093 to Vikene;

B) Lines 39-48 in the first column on page 124 of the 1980 publication "An Automated Programming Control System For Cable TV" by Beck (as presented by Stern)];

C) etc,...

Although most of the automated recording systems described above were described for use at household receiving locations, it was well known in the art to have used such automated recording systems within intermediate regional/local TV broadcast stations too. Specifically, at the intermediate station locations, automatic recording devices were used to record network TV programming segments for later/delayed broadcast thereat. In this regard, the prior art of record shows that it was conventional for central TV broadcast stations to have inserted tags/labels within the VBI of the TV programming segments that were sent during "dark" hours of operation in order to allow respective regional TV broadcast station to automatically record desired program segments for later/delayed broadcast. This configuration was known to have been advantageous in that it: eliminated the need for the central station to manually transport dubbed programming tapes to and from its local affiliates/outlets; and reduced the peak bandwidth requirements

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of a transmission path that served many local/regional stations.
See, for example:

A) The discussion under the heading "8. Unattended VTR's remote controlled" in the second column on page 8 of the article "Vertical Signal Applications" by Etkins (Broadcast Engineering, April 1970, pages 30-35);

B) U.S. Patent #3,866,123 to Hetrich which disclosed a system for sending control signals through conventional Radio or TV networks within their network programming, wherein these embedded control signals were used to control various operation at remote affiliate Radio or TV station locations. In one cited application, the embedded control signals were used to control the automatic recording of the network programing at the affiliate stations for delayed broadcast.

"The present invention relates to method and system for transmitting control signals or "que's" to member stations of a network of radio or television stations"
[emphasis added]
[lines 5-7 in column 1 of Hetrich]

"These control signals may be used to start or stop audio recorders to record special programs for later broadcast, to accomplish the switching of local and network programs, to interrupt programming for emergency announcements, etc."
[lines 31-35 in column 5 of Hetrich]

C) JP patent document #54-37506 to Naka et al which further evidence that it was well known to have transmitted "programming" from a master station, e.g. for automatic recording and delayed broadcast by subordinate stations, during "dark" hours of the master station's operation.
[see the abstract]

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The prior art automated recording devices cited above all seem to have been "cue signal" based systems. Namely, these automated recording systems seem to have operated by continuously monitoring the TV stations' broadcasts for the desired program segment identifier tags/labels (e.g. "cues"). However, German patent document #3,307,885 to Apitz evidences that, **as of 13 September 1984**⁵³, it was known for such automatic recording devices to have been modified to have operated on a "time" basis too. Namely, the automatic recording device described by Apitz looked for the desired identifier tags/labels in received TV broadcasts in the manner described above, but only during "expected" windows of time. Specifically, the Apitz automatic recording device was activated, to monitor received TV/Radio broadcasts for the desired program segment identifier tags/labels (e.g. cues) only during scheduled time windows which bracketed the expected broadcast times of the desired program segments which were to be recorded.⁵⁴

⁵³ This date falls after the 1981 filing date of applicants' 44 page parent specification, but before the 1987 filing date of applicants' 557 page instant 1987 CIP specification.

⁵⁴ The examiner believes that such a showing is particularly relevant to the current prosecution because:

A) In the prior art of record, TV stations appear to control program flow/switching based strictly on detected program "cuing" signals or, alternatively, based strictly on "time" (i.e. strict broadcast schedules); and

B) In contrast, the intermediate TV network/station circuitry of applicant's alleged invention (i.e. that of figure 6) appears to control program flow/switching based on both: embedded cuing signals (i.e. program segment identifiers); and time (program transmission schedules).

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III. THE VERTICAL BLANKING INTERVAL (VBI) OF TELEVISION BROADCASTS WAS KNOWN TO HAVE BEEN A GENERAL PURPOSE TRANSMISSION PATH FOR CARRYING ANCILLARY SIGNALING:

Long before 1981, it was notoriously well known in the art to have inserted/embedded digitally encoded "instruction", "control", "information", and "messaging" signals into vacant lines in the VBI of distributed TV programming. These embedded signals were used to control the execution of a wide variety of downstream machines and "equipment". Examples of such signaling include the two versions of program label/tags described above which were embedded in the VBI of TV programming and were used: 1) to monitor the automated program switching process; and 2) to control the automatic recording/playback of program segments. Many more examples of such known VBI carried/embedded signaling were described in the following prior art:

A) The translation of the 1968 Japanese article "System and Apparatus For Automatic Monitoring Control Of Broadcast Circuits" by Yamane et al.;

B) The 1964 UK Patent Document #959,274 to Germany;

C) The 1971 article "The Vertical Interval: A General-Purpose Transmission Path" by Anderson;

D) The 1970 article "Vertical Interval Signal Applications" by Etkins;

E) The 1973 article "A System of Data Transmission in the Field Blanking Period of the Television Signal" by Hutt;

F) The 1973 article "Ad Hoc Committee on Television Broadcast Ancillary Signals" by O'Conner; and

G) The 1974 Australian Patent Document #74,619 to Hetrich, being among the more notable of such prior art.

[Appendix A, attached hereto, shows that the prior art cited above contains lists of the various types of digital

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signaling that were known to have been conveyed in this fashion].

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IV. REMOTE CONTROL OF INTERMEDIATE TV STATIONS OF NATIONWIDE TV NETWORKS VIA ANCILLARY SIGNAL CARRIED IN THE VBI OF TV PROGRAMMING BROADCASTED FROM A CENTRALIZED NETWORK TV STATION LOCATION:

In the preceding section, it was shown that the use of the VBI as a general purpose transmission path for carrying ancillary signaling was notoriously well known in the art. The following discussion will show that it was also notoriously well known to have used this same embedded ancillary signaling to remotely control the operation of intermediate TV/Radio broadcast stations from a centralized originating network TV station location:

A) U.S. Patent #3,551,592 to Nakamura evidences the fact that it was notoriously well known to have embedded ancillary signaling within the vertical blanking interval (VBI) of distributed network TV signals in order to have controlled downstream intermediate TV stations from the central network TV station location:

"An object of the present invention is to provide a device applicable to a novel and useful system for controlling and supervising a nationwide television broadcasting network consisting of many kind of district center stations and the low grade stations and relay stations at a central broadcast controlling station, in order to effect a smooth operation and control of transmitting and repeating of a complicated nationwide television program and many local television broadcasting programs, which system may obviate routine acts by the operational staffs. Another object of the present invention is to provide a very effective and convenient device for the supervision and control of a nationwide television broadcasting network while transmitting television signals as usual, and further transmitting a selected control signal from a plurality of necessary kinds of broadcasting program operational instructions or a supervisory signal for necessary program reception confirmation or faults supervision, such as an

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*instantaneous open circuit of the transmission path,
by using available transmission time space"
[lines 13-33 of column 1 of Nakamura]*

The ancillary signaling in the Nakamura consisted of both "information" type signaling and "control" type signaling. The information type signaling was inserted into (and carried by) lines 19 and 282 of the distributed network TV signal's VBI while the control type signaling was inserted into (and carried by) lines 21 and 284 of said television network TV signal's VBI [lines 52-72 of column 1]. In addition to controlling the intermediate stations, Nakamura recognized that this same embedded signaling could also be used to control household receiver functions from the network station location too:

"However the system of the invention can be further utilized to transmit a broadcasting wave while superimposing said information signal on the television image signal. In the receiving end an adaptor according to the invention is added to the receiving equipment, thus to obtain various useful operations for the broadcast program control, such as for example for the service of automatic operation of each television receiver for a very serious emergency broadcasting program or for a monitoring check of the receiving program in each receiver for obtain data for the investigation of the percentage of observers of a program".

[lines 47-57 of column 4]

The translation of the document "System and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yamane et al. (NKH Gitjutsu Kenkyu, Vol. #20, Issue #3, Entry #106, pages 1-32, 1968) describes a similar, if not the same, transmission system that was described in Nakamura. Specifically, Yamane et al. also disclosed a system for controlling a nationwide TV distribution system from a central station location using information-type and

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control-type signaling embedded within the VBI of distributed TV programming. The Yamane et al. document included the following teachings:

"The primary purpose of 'automating' is for unmanned operation and to rely on machines for most processes"
[lines 21-22 on page 5 of the translation]

"Motion function refers to accurately transmitting a produced program according to a standard plan comprised of a continuous broadcast procedure called the confirmed program schedule and a broadcast region"
[lines 13-16 on page 3 of the translation]

"Of the motion work performed by the regional local control room, this section focuses on (a) circuit reception monitoring and (b) program switching operations. Specifically, (a) to deal with circuit trouble, the progress of the circuit reception program is monitored to obtain the next switching opportunity, and (b) except for operations such as news programs that should, rather, be called program control, this refers to the operation of switching according to the confirmed program schedule. Automating these operations is the first link that must be advanced when program flow is viewed from the standpoint of a nationwide broadcast network"
[lines 9-18 on page 6 of the translation]

"Program transmission switching frequency at the regional station averages 110 times for radio and 60-plus times for television every day. The operation of switching during broadcast between program content and the next program content being prepared while referring to the schedule shown in the confirmed program schedule, is completely compatible with complete automation or centralized remote control"
[the last three lines on page 7 and the first 4 lines on page 8 of the translation]

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"The pros and cons of whether to have the switching system [operate] according to time or according to cues is a problem, but this is governed by program editing policy"

[lines 4-6 on page 8 of the translation]

"When it comes to automating cue signal transmission, however, whether to transmit by control line or to insert a control signal in the program is determined by the type and content of control information to be transmitted, and is difficult to state categorically. For control information relating to content directly linked to the program such as starting and ending the program, however, the method of inserting in the program is considered simpler in terms of structure on a national scale" (emphasis added)⁵⁵

[the last 6 lines on page 8 and the first two lines on page 2 of the translation]

"Signal multiplexing by a two-frequency combined signal within a high frequency notch in the audio circuit and time-division multiplexing by a two-frequency combined signal within the vertical blanking interval in the video circuit are effective as systems for transmitting information signals multiplexed on broadcast program circuit"

[lines 7-12 on page 99 of the translation]

⁵⁵ This teaching seems particularly relevant when viewed in terms of the stated objectives of applicant's own alleged invention [note lines 25-32 on page 13 of applicant's instant specification].

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B) GB #959,274 to Germany evidences the fact that it was notoriously well known in the art to have inserted control type signaling within the VBI of TV programming to remotely control the operation of downstream affiliate station from a centralized network TV station; i.e. such functions including the insertion of local programming segment into the national network broadcast. Germany also evidences the fact that it was notoriously well known in the art to have used these same inserted control signals to remotely control the operation of devices located at/within home TV receivers as well:

"The present invention consists in a cuing system for television, wherein at least one line of the frame suppression period of the television waveform contains plural different cue signals occurring one after another throughout the line period"

[lines 38-43 of page 1]

"The growing complexity of television networks, with transmitters for different areas linked by V.H.F. channels and land-lines has introduced the need for a cuing system to facilitate the insertion of local announcements, regional broadcasts, alternative advertisements, and the like into different programmes"

[lines 8-14 of page 1]

"Each circuit [of the signal monitoring circuits] will trigger its appropriate relay or other control device 5 automatically to carry out the desired operation on receipt of the correct cue signal"

[lines 84-88 of page 1]

"[The embedded cuing signals] may actually be transmitted [through the intermediate TV stations] as they will not be visible to viewers and will have no effect on the normal receiver circuits, but if it is found desirable, then they may be blanked out at the transmitter [of the intermediate station]"

[lines 29-34 of page 2]

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"[T]he cue signals may be transmitted so as to operate monitoring circuits provided in ordinary viewers television receivers. Such monitoring circuits may control any desired device, for example control the switching on of a domestic appliance at a given time" [lines 44-50 of page 2].

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V. "TELETEXT" TRANSMISSION SYSTEMS WERE DEVELOPED FOR THE PURPOSE OF PROVIDING A GENERAL PURPOSE TRANSPORT VEHICLE FOR CARRYING "ALL" KINDS OF ANCILLARY SIGNALING THROUGH THE VBI OF DISTRIBUTED TV PROGRAMMING:

As shown above, it was notoriously well known in the art to have conveyed ancillary signaling in the VBI of TV programming. However, due to the wide variety of applications that could be served by such ancillary signaling and the limited bandwidth available within the VBI for such signaling, the need for a "generic"/"general purpose" transport vehicle had long been recognized by those of ordinary skill in the art. In this regard, it is noted that the 1973 publication "Ad Hoc Committee on Television Broadcast Ancillary Signals" by O'Conner (Journal of the SMPTE, Volume 82, pages 1017-1019, December 1973] explicitly states:

- (1) "there is an awareness within the industry of the wide variety of special signals that could be accommodated within the time and frequency domains of the television signal - without in any way adversely affecting the integrity of the program signal itself. Also, there exists considerable concern as to the effect on the industry of the emergence of a variety of conflicting proposals for the 'valuable real estate' contained within the television signal"
[lines 14-18 in the second column on page 1017]
- (2) "There is an unquestioned need for the 'all-purpose data signal' that could provide many broadcast-related functions"
[lines 28-30 in the second column on page 1019]
- (3) "Category B (vertical blanking interval) - This subcommittee is investigating a format for an all-purpose data signal, that could meet virtually all of the miscellaneous ancillary signals described in II (c) above, without incurring any likelihood of adverse effects to the program signal" [lines 35-39 in column 2 on page 1018],

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Wherein referenced section, "II (c)", states:

"(c) Most other requirements [besides transmitter test signal, program reference signals, and audio channels] involve a relatively low information rate, and probably could be accomplished via an all-purpose data signal (such signals are currently under development in the United States and in many other countries throughout the world, including the United Kingdom, Germany, and Japan)"⁵⁶

By 11/02/1981, e.g. the filing date of applicant's 1981 parent specification, such all-purpose data signals had in fact been realized in the form of "Teletext" data services. Namely, Teletext data packet structures/standards had been developed around the world to serve as the desired "all-purpose data signal". Specifically, Teletext data packets/standards had been designed for carrying just about any type of information within the VBI of distributed TV programming. The types of information included:

- 1) Pages of character/graphic data;*
- 2) Equipment control information;*
- 3) Computer software (Telesoftware);*
- 4) Program identifiers/labels/tags for use in monitoring applications and automatic recording applications;*

⁵⁶ This reference to the "all purpose data signal" that was "currently under development in the United States and many other countries" was clearly directed to the development of Teletext standard/services that were underway in the various counties at that time.

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5) etc, ...

Such is evident via the following "prior art":

1) "Attachment C" of the *Petition For Rule Making*, entitled "UK Teletext System 525 Line 60 Field Applications", which was filed with the FCC on 3/26/1981 by "The United Kingdom Teletext Industry Group";

[note first page of attachment]

2) European patent document #0,028,443 to Chambers (published 5/13/1981);

[note lines 5-32 on page 6]

3) The 1980 article "A Public Broadcaster's View of Teletext in the United States" by Gunn;

[see entire document]

4) The 1980 article "Telesoftware - Value Added Teletext" by Hedger et al.;

[see entire document]

5) The two translations of German patent document #2,904,981 to Zaboklicki (published 8/16/1979);

[see entire document]

6) The translation of Japanese patent document 55-028691 to Oono et al [published 2/29/1980];

[see entire document]

7) US Patent #4,862,268 to Campbell et al. and related PCT publication WO 81/02961 of 10/15/1981 to Campbell et al.;

[note lines 26-47 of column 17 of the US Patent (i.e. pages 25 and 26 of the related PCT)]

8) The article "Teletext in the Federal Republic of Germany by Messersschmid (march 26-28 of 1980);

[see entire document]

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9) The article "Landmark Forms Cable Weather News Network" (Editor & Publisher, page 15, 8/8/1981);
[see entire document]

10) British patent document #1,556,366 to Betts (published 11/21/1979);
[note: lines 50-54 and 70-73 of page 1; lines 61-65 of page 3; etc,...]

11) US patent #4,218,698 to Bart et al (filed 3/6/1979);
[note lines 12-24 of column 1]

12) The "CBS/CCETT North American Broadcast Teletext Specification (Extended Antiope)" document published 5/20/1981;
[note lines 135-138]

13) The revised "EIA Systems Analysis Chart" of 8/20/1981;
[see entire document]

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VI. CONVENTIONAL TV NETWORK STRUCTURES:

1) At the time of applicants' invention, it was notoriously well known in the art for TV distribution networks to comprised: one centralized network TV station; a plurality of intermediate affiliate TV stations; and multitudes of ultimate receiving stations. Haselwood et al. [U.S. Patent #4,025,851] has been cited as being illustrative of such conventional TV network configurations. Namely, Haselwood et al. shows a conventional TV network configuration that comprised:

A) A centralized network TV station for supplying a network TV signal comprised of network originated TV programming segments (e.g. represented by figure 1);

B) A plurality of local affiliate stations, i.e. one of which is represented in figure 3, each of which comprised a program selector (46) which operated to selectively pass a sequence of locally generated program segments (i.e. from 44) and the received network programming segments (i.e. @ 16) to generate a continuous TV programming output signal for transmission by a transmitter (42) [note lines 25-41 of column 4]; and

C) Multitudes of household receiving locations (not shown) which received the continuous programming signal transmitted by the transmitter of a respective affiliate station.

Haselwood et al. points out that the local program source (44) of the local affiliate TV stations was known to have included VTRs for playing back respective network programming segments that had been recorded at the affiliate stations for delayed broadcast:

"A program selector 46 is used selectively to connect the network feed line or the local program source 44 to the transmitter 42 so that either a network or

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local program may be broadcast. The local program source 44 may be one of various program sources including a television camera for broadcasting live programs, a flying spot scanner for showing movies, or a video tape recorder for playing back video taped programs including network programs that had been previously taped for delayed broadcast."
[lines 29-41 of column 4]

2) At the time of applicants' invention, conventional TV stations were known to have comprised systems for generating and embedding pages of a Teletext data service within the VBI of their TV transmissions. For example, note:

A) The article "ORACLE on Independent Television" publication by Green et al.

(IBA TECHNICAL REVIEW, September 1976, page 25 in particular);

B) The 1972 British patent document #1,370,535 to Millar et al. (e.g. figure 1);

C) The article "A TEXT TRANSMISSION SYSTEM IN TELEVISION (text television)" by Murasaki et al.

(International Broadcasting convention, London, England, 20-24 September 1976, figure 2 in particular);

D) The article "The Television as a Receive Only Terminal" by McArthur

(Systems International, vol. 5, no. 2, March 1976, the figure at the top of page 39 in particular); and

E) US Patent #3,996,583 to Hutt et al.

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In TV networks which comprised an originating network TV station and intermediate local/regional affiliate TV stations (i.e. note Haselwood et al. above), it was conventional for the network TV station and each of its local/regional affiliate stations to have comprised their own Teletext system for generating and inserting their own Teletext data service into their own TV signal transmissions. Because the local affiliate stations incorporated the network station's programming transmission into their own TV transmissions, the teletext system of the affiliate stations required circuits for merging the network station's Teletext service with their own local/regional Teletext service. These circuits were known as "data bridges". Illustrations of such circuitry are found in the following:

A) *Figure 4 of the article "Teletext Signal Generation Equipment and Systems" by Mothersole*

(IEEE Transactions on Consumer Electronics, Vol CE-25, No. 3, July 1979)

B) *Page 22 of the article "ORACLE on Independent Television" publication by Green et al.*

(IBA TECHNICAL REVIEW, September 1976);

C) *The figure labeled "TELETEXT-TYPICAL STATION CONFIGURATION" from the "VSA'S Teletext Products" section of the VSA product brochure.*

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VII. CONCLUSION:

Given that which has been discussed in parts I-VI above, the examiner takes the following positions:

- 1) That US Patent #4,025,851 to Haselwood et al. illustrated conventional TV network structure (see section VI above);**
- 2) That one skilled in the art would have understood that selector (46) of the local TV station (figure 3) in Haselwood et al. inherently comprised a conventional TV switching circuit (of notoriously well known origin);**
- 3) That, in light of part I above, one skilled in the art would have recognized the obviousness of having automated this switching circuitry (46) in Haselwood et al. in order to have avoided switching problems caused by human error. Specifically, that it would have been obvious to have automated the "sequencing" of the switching circuitry (46), and of the local program segment sources (@ 44), according to a locally stored TV segment transmission schedule;**
- 4) That the prior art shows that it was known to have performed the necessary generation of said TV program segment transmission schedule locally within the local TV station itself and, alternatively, remotely at some centralized network station location (i.e. in which case the schedule would have to be transported and/or downloaded to the local station for storage thereat);**
- 5) That, in light of part II above, it would have been obvious to one skilled in the art to have automated the recording operation that was explicitly described in Haselwood et al. Specifically, Haselwood et al. states that the local TV signal source (44) of the local station included a VTR for recording network programming for delayed broadcast. And while Haselwood et al. did not state how this recording was to be accomplished, the prior art evidences that it was conventional:**

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A) To have automated said recording process by embedding program segment identifiers/tags/labels within the VBI of network programming segments being broadcasted from the network station; and

B) That the automation of this recording process was advantageous because:

1. It enabled network programming segments to be transferred to the local/regional stations during "dark" hours of operation thereby reducing the bandwidth requirements of the network feed; and/or

2. It enabled network programming segments to be distributed to respective local/regional stations electronically rather than physically carrying "bicycling" dubbed copies to and from the local/regional station.

6) As noted part V above, it was notoriously well known in the art:

A) For each TV station of a TV network, e.g. network stations and local/regional/affiliate TV stations, to have comprised its own Teletext system for generating and inserting its own Teletext service into the VBI of its own TV signal transmission; and

B) For the local/regional stations to have comprised the necessary "bridging" circuitry that enables selected portions of the network station's Teletext service to be incorporated into their own Teletext service for distribution locally/regionally.

It is maintained that it would have been obviousness to have modified the network station, and each of the local/regional stations, in the network described by Haselwood et al. with Teletext circuitry which allowed each station to provide its own Teletext service. Motivation for the modification being provided by the desire of each station to increase its own revenues via by selling the advertising space provided therein.

As evidenced in part V above, Teletext services were actually designed to act as general purpose vehicle by which a wide variety of control-type and information-type signaling was to be conveyed through a TV network. Being

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such, it would have been obvious for the Teletext services of the TV stations in the modified system of Haselwood et al. to have been used for their designed purpose; namely for the purpose of distributing a wide variety of control-type and information-type signaling (note parts III-V above).